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ENDLESS ACCUMULATION, LIMITS TO GROWTH, AND THE TENDENCY FOR THE RATE OF PROFIT TO FALL

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Abstract: This article proposes a simple new model that helps to analyze the long-term movement of the profit rate. The article applies the new model to the United States and China, the world's two largest economies, to illustrate how the new model may help analyze the global capitalist crisis in the 21st century. In the new model, the long-term movement of the profit rate depends on the long-term average economic growth rate and the ratio of accumulation. As the capitalist economy stagnates and ecological sustainability imposes constraints on future economic growth, capitalism may have exhausted its historical capacity to check the tendency for the rate of profit to fall.

Key words: profit rate; accumulation; crisis; the US economy; the Chinese economy

Thomas Piketty's book, *Capital in the Twenty-First Century*, has received widespread attention. Many have commented on Piketty's book and debated the long-term trend of income and wealth inequality in the leading capitalist economies (see Foster and Yates 2014). However, few paid attention to the significant influence that Marx's works had on Piketty, especially the relationship between Piketty's work and Marx's famous hypothesis on the "Law of the Tendency for the Rate of Profit to Fall."

In this article, I propose a simple new model on the interaction between the profit rate and capitalist accumulation (related to what Piketty calls the "Second Fundamental Law of Capitalism"). The article applies the new model to the United States and China, the world's two largest economies, to illustrate how the new model may help analyze the global capitalist crisis in the 21st century.

In the new model, the long-term movement of the profit rate depends on the long-term average economic growth rate and the ratio of accumulation (the share of capitalist net investment in the total profit). As the capitalist economy stagnates and ecological sustainability imposes constraints on future economic growth, capitalism may have exhausted its historical capacity to check the tendency for the rate of profit to fall. The "law of the tendency for the rate of profit to fall" originally proposed by Marx in the 19th century may eventually be validated by the world historical events in the 21st century.

Marx and Piketty

The "Law of the Tendency for the Rate of Profit to Fall" was one of the most important propositions on political economy developed by Karl Marx. Being a system based on the pursuit of profit, capitalism needs a certain level of profit rate to function effectively and stably. According to Marx, the tendency for the rate of profit to fall, if not checked, would impose an insurmountable limit to capitalist accumulation and potentially threaten the survival of capitalism as a viable economic and social system (Marx [1894] 1967, 259).

Marx discussed the "law of the tendency for the rate of profit to fall" in *Capital*, volume 3. According to Marx, capitalist technological progress had a strong tendency toward mechanization (substitution of fixed capital for labor). As capitalist production became progressively more capital intensive, the "organic composition of capital" (the ratio of "constant capital" over "variable capital" or the ratio of the value of the invested means of production relative to the value of labor power) would tend to rise. If the rise of the organic composition of capital was not offset by a larger increase in the rate of surplus value, the profit rate would tend to fall (Marx [1894] 1967, 211–66).

In the modern formulation of Marxist political economy, the profit rate is often disaggregated into the profit share (the share of the capitalist profit in the national economic output) and the output-capital ratio (the ratio of economic output to invested capital stock; see Devine 1987; Dumenil and Levy 1993). The inverse of the output-capital ratio (the capital-output ratio) is closely related to Marx's concept of "organic composition of capital." The capital-output ratio roughly corresponds to the ratio of the value of the invested means of production over the new value created by the current productive labor. If the labor share of economic output (the ratio of the value of labor power over the new value created) changes within a limited range, then the capital-output ratio would in general move in the same direction as the organic composition of capital. Thus, the hypothetical tendency toward rising organic composition of capital may be reformulated as a tendency for the capital-output ratio to rise.

In *Capital in the Twenty-First Century*, Thomas Piketty characterized Marx's conception of capitalism as the "principle of infinite accumulation." While Marx proposed the tendency toward rising organic composition of capital, Piketty argues that when the capitalist rate of return is sufficiently large relative to the economic growth rate, there is a tendency for the "capital-income ratio" to rise (what Piketty calls the "capital-income ratio" is similar to what modern Marxist political economists call the "capital-output ratio" and related to Marx's "organic composition of capital").

Piketty proposes what he calls the first and the second "Fundamental Law of Capitalism." The "First Fundamental Law" is in fact an accounting identity, which simply says that the capital income share (the capital share of national income) equals the rate of return on capital multiplied by the capital-income ratio. The "Second Fundamental Law" says that in the long run, the capital-income ratio is determined by the ratio of the saving rate over the economic growth rate (Piketty 2015, 5–25, 166–70).

If the capital-income ratio rises, this will result in either falling rate of profit (if the capital income share stays constant) or inexorable rise of the capital income share (if the rate of return on capital stays constant). Either way, the stability of capitalism will be undermined. Piketty argues that in the 21st century, as the economic growth slows down but the saving rate stays high, the leading capitalist economies will again face rising capital-income ratios that threaten to destabilize the capitalist system (Piketty 2015, 7–11, 195–96, 227–30).

If we are interested in the profit rate rather than the "capital-income ratio," then it can be shown that in the long run, the profit rate is determined by the profit's growth rate and the "saving rate" of the capitalist class (or the "ratio of accumulation").

Profit Rate and Accumulation: A Simple Model

Profit rate is the ratio of the capitalist profit over the invested capital stock. Mathematically, it is obvious that the movement of the profit rate depends on the relative growth rate of the profit and the capital stock. If the profit grows more rapidly than the capital stock, the profit rate will rise. If the profit declines or grows more slowly than the capital stock, the profit rate will fall. If the profit grows at the same rate as the capital stock, the profit rate will be at "equilibrium," neither rising nor falling.

Consider the capital stock's growth rate:

$$\text{Capital Stock's Growth Rate} = \frac{\text{Net Investment}}{\text{Capital Stock}}.$$

Net investment is the difference between the total new investment in capital stock (gross investment) and the depreciation of the existing capital stock.

In this article, I define the "ratio of accumulation" as the share of net investment in the capitalist profit. It tells what portion of the capitalist profit is used for productive investment rather than for capitalist consumption or financial speculation. It turns out that the capital stock's growth rate depends on the ratio of accumulation and the profit rate:

$$\begin{aligned}\text{Capital Stock's Growth Rate} &= \frac{\text{Net Investment}}{\text{Capital Stock}} \\ &= \left(\frac{\text{Net Investment}}{\text{Profit}}\right)\times\left(\frac{\text{Profit}}{\text{Capital Stock}}\right) \\ &= \text{Ratio of Accumulation} \times \text{Profit Rate.}\end{aligned}$$

Figure 1 illustrates the interaction between the profit rate and capitalist accumulation using a hypothetical model where the profit's growth rate is assumed to be 5% and the ratio of accumulation is assumed to be 50%.

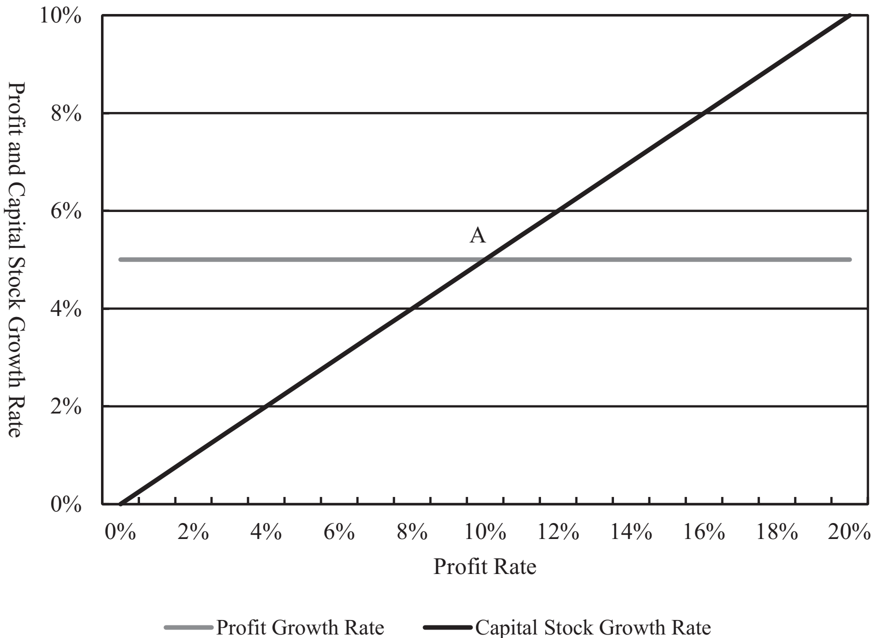

Figure 1 Profit Rate and Accumulation (a Hypothetical Model, Profit Growth Rate = 5%, Ratio of Accumulation = 50%)

Note: A hypothetical model of profit rate and accumulation.

In Figure 1, the profit's growth rate is treated as an exogenous variable and shown as a horizontal line; the capital stock's growth rate is proportional to the profit rate, and the slope of the capital stock growth rate line is the ratio of accumulation. The profit's growth rate and the capital stock's growth rate intersect at point A. To the left of point A, the profit's growth rate is greater than the capital stock's growth rate, thus the profit rate tends to rise. As the profit rate rises, the capital stock's growth rate rises toward point A. To the right of point A, the profit's growth rate is smaller than the capital stock's growth rate, thus the profit rate tends to fall. As the profit rate falls, the capital stock's growth rate falls toward point A. Either way, the capital stock's growth rate converges to equalize with the profit's growth rate. When the capital stock's growth rate equals the profit's growth rate (at point A), the profit rate neither rises nor falls, and "equilibrium" is reached.

At equilibrium (point A):

$$\begin{aligned}\text{Profit's Growth Rate} &= \text{Capital Stock's Growth Rate}\\ &= \text{Ratio of Accumulation} \times \text{Profit Rate}\end{aligned}$$

$$\text{(Equilibrium) Profit Rate} = \frac{\text{Profit's Growth Rate}}{\text{Ratio of Accumulation}}.$$

Thus, the equilibrium profit rate is determined by the profit's growth rate divided by the ratio of accumulation. It tells us where the profit rate will be in the long run if a certain profit's growth rate and a certain ratio of accumulation are held indefinitely. In the hypothetical model, the equilibrium profit rate equals 10% (5% / 50% = 10%).

In the long run, the movement of the profit rate depends on the profit's long-term average growth rate and the long-term average ratio of accumulation. For the profit rate to fall, it requires either a tendency for the ratio of accumulation to rise (which is subject to the theoretical limit of 100%) or a tendency for the profit's growth rate to fall. Conversely, to check the tendency for the rate of profit to fall, it requires either rising profit growth rate or falling ratio of accumulation.

In the following sections, I will use empirical data from the United States and China (the two largest economies in the world) to illustrate how the profit's growth rate and the ratio of accumulation have interacted to determine the profit rate in the actual development of capitalist economies.

Profit Rate: United States and China

The United States is the hegemonic power in the capitalist world system and the world's largest economy measured by market exchange rate. China overtook the United States to become the world's largest economy measured by purchasing

power parity in 2014. Officially, the Chinese leadership claims that China is a "socialist market economy." In reality, the Chinese economy is now dominated by domestic and foreign private enterprises. There has been a growing consensus among the Marxist economists that China now plays a major role in global accumulation (see Hart-Landsberg and Burkett 2005).

In 2013, the United States and China together accounted for 34% of the global economic output by market exchange rate or 32% of the global economic output by purchasing power parity (World Bank 2015). In the near future, the two economies will continue to dominate the global economy. Figure 2 shows the US business sector profit rate from 1929 to 2014 and China's business sector profit rate from 1990 to 2014.

The business sector profit rate is defined as the total profit divided by the business sector capital stock. Total profit is defined as the sum of pre-tax property incomes generated from domestic production (corporate profits, net interest payments, rental income, and the capital component of proprietors' income). The business sector capital stock is measured by the business sector's net stock of fixed assets (measured at replacement cost).

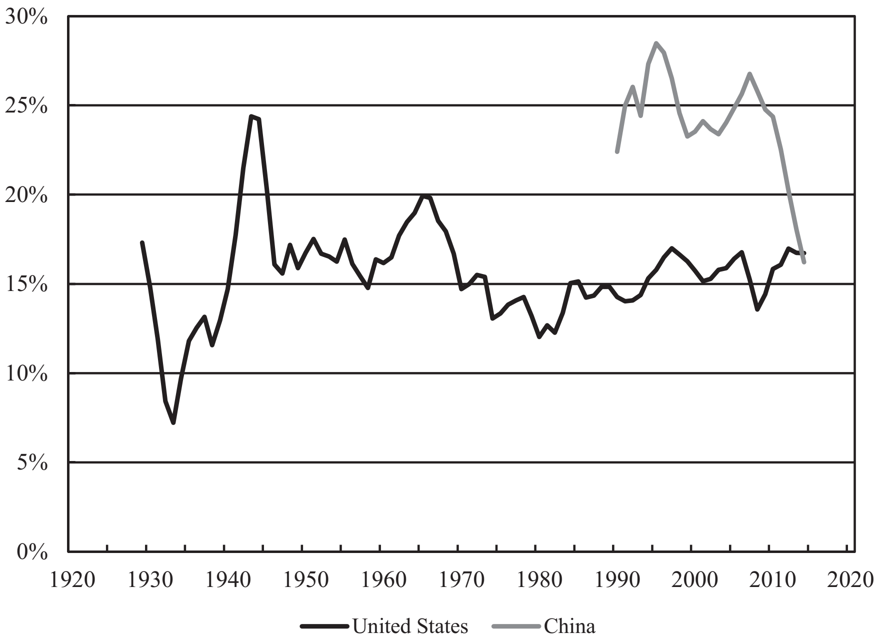

Figure 2 Business Sector Profit Rate (United States and China, 1929–2014)

Sources: The US Bureau of Economic Analysis (BEA 2015a, 2015d) and various issues of *China Statistical Yearbook* (NBS 2015 and earlier years). See also Appendix.

From 1940 to 1970, the US business sector profit rate mostly fluctuated between 15% and 20%. Since the 1980s, the US profit rate has fluctuated around 15%. The profit rate fell below 15% for prolonged periods in the 1930s and in the 1970s and 1980s when the American capitalism struggled with major crisis. The profit rate fell below 15% in 2008 and 2009 during the "Great Recession." Historical experience suggests that the American capitalism probably needs a business sector profit rate above 15% to maintain basic stability.

From 1990 to 2010, China's business sector profit rate was very high, fluctuating around 25, higher than the US profit rate by about 10 percentage points. The very high profit rate underpinned China's rapid accumulation of capital. However, China's profit rate has fallen since 2007 and has declined precipitously since 2010. By 2014, China's profit rate declined to 16.2%, already lower than the US profit rate in the same year (16.7%). Under the current trend, China's profit rate will approach 10% in just a few years, a profit rate level that the American capitalism had seen only during the worst years of the Great Depression.

Table 1 summarizes the historical statistics for the profit's growth rate, the ratio of accumulation, the equilibrium profit rate, and the average profit rate in the United States and China. The first column shows the countries and the historical periods. The second column shows the profit's growth rate, measured by the average annual growth rate of real profit between the beginning year and the ending year of a given period; real profit is measured by the nominal profit deflated by the capital stock price index.[1] The third column shows the ratio of accumulation, measured by the average annual ratio of accumulation during a given period. The fourth column shows the equilibrium profit rate, calculated by dividing the numbers in the second column by the numbers in the third column. The equilibrium profit rate tells that, if the profit's growth rate and the ratio of accumulation in a given period were held indefinitely, where the profit rate eventually would be. The fifth column shows the average profit rate or the average annual profit rate during a given period.

In Figure 1, if the current profit rate is smaller than the equilibrium profit rate, the profit rate will tend to rise and converge toward the equilibrium profit rate; if the current profit rate is greater than the equilibrium profit rate, the profit rate will tend to fall and converge toward the equilibrium profit rate. Thus, in general, when the equilibrium profit rate is higher than the average profit rate, the average profit rate tends to rise; when the equilibrium profit rate is lower than the average profit rate, the average profit rate tends to fall.

In the US economic history, high equilibrium profit rates in the 1940s, 1980s, and 1990s contributed to the rise of the average profit rate in these periods. In the 1950s and 1970s, low equilibrium profit rates contributed to the decline of the

Table 1 Profit Rate and Its Determinants, United States and China (Average Annual Rates of Change or Annual Averages)

	Profit's growth rate (%)	*Ratio of accumulation (%)*	*Equilibrium profit rate (%)*	*Average profit rate (%)*
United States				
1931–40	–0.4	–7.8	na	11.4
1941–50	3.3	11.3	28.8	19.0
1951–60	2.5	18.5	13.3	16.3
1961–70	3.1	24.3	12.6	17.9
1971–80	1.8	27.4	6.5	14.0
1981–90	4.8	22.4	21.3	14.1
1991–2000	3.8	18.5	20.8	15.6
2001–10	1.7	11.6	14.8	15.4
2011–14	4.6	9.3	31.1	16.6
1931–2014	2.6	15.5	16.6	15.5
China				
1991–2000	12.9	41.9	30.8	25.7
2001–10	13.3	45.2	29.4	24.7
2011–14	2.7	63.0	4.2	19.3
1991–2014	11.3	47.5	23.8	24.2

Sources: The US Bureau of Economic Analysis (BEA 2015a, 2015d) and various issues of *China Statistical Yearbook* (NBS 2015 and earlier years). See also Appendix.

average profit rate in these periods. In the 1960s, the equilibrium profit rate was relatively low, and the annual profit rate actually declined from 16.2% in 1960 to 14.7% in 1970. But the high profit rates in the mid-1960s (near 20%) helped to pull up the decadal average.

During 2011–14, the US equilibrium profit rate surged to 31%. The very high equilibrium profit rate contributed to a strong recovery of the US profit rate after the "Great Recession."

On the other hand, China's equilibrium profit rate has collapsed since 2011. During 2011–14, China's equilibrium profit rate fell to only 4.2%. The very low equilibrium profit rate has already led to a precipitous decline of China's average profit rate. If the current trend continues, the Chinese economy is likely to fall into a major crisis in the near future.

In the long run, the long-term average profit rate is similar to the equilibrium profit rate calculated from the long-term average profit growth rate and the ratio of accumulation. From 1931 to 2014, the US profit rate averaged 15.5%, and the equilibrium profit rate was 16.6%. From 1991 to 2014, China's profit rate averaged 24.2%, and the equilibrium profit rate was 23.8%.

Endless Accumulation of Capital?

Capitalism is distinguished from the previous social systems by the dominance of market relations in production and exchange. Under the dominance of market relations, capitalists are compelled to compete against one another for market share and power. Those who fail in competition will become bankrupt and cease to be capitalists. To prevail in market competition, capitalists are both motivated and pressured to use a large portion of their profits to make investment in expanded reproduction and new technology, accumulating capital on increasingly larger scales. It is for this reason that Immanuel Wallerstein considers the "endless accumulation" of capital as the defining feature of capitalism (Wallerstein 1998, 35).

Interestingly, in recent years, the Chinese economy has behaved according to this classical image of capitalism in pursuit of endless accumulation. In the 1990s and the early 2000s, capital accumulation (the business sector net fixed investment) accounted for about 42%–45% of China's total profit. Since 2011, the average ratio of accumulation has surged to more than 60%. The very high accumulation ratios have underpinned China's "economic miracle" and made possible China's rapid industrialization.

However, given a certain level of profit growth rate, higher accumulation ratio results in a lower profit rate. As China's profit growth rate declines, China's high accumulation ratios have contributed to the rapid decline of China's profit rate. This may prove to be the key contradiction that could fatally undermine the Chinese economy in the coming years.

In the 1960s and 1970s, the US accumulation ratio reached 24%–27%. Since then, the US accumulation ratio has steadily declined. During 2011–14, the accumulation ratio averaged about 9%. The very low accumulation ratio, in combination with the rapid growth of real profit, has led to a strong recovery of the profit rate since the "Great Recession."

If the American capitalists have not used their enormous profits for productive investment, what have been the uses of their profits? Without productive investment, how can the American capitalists expand their wealth and maintain their global dominance? Can the low accumulation ratio be sustained indefinitely?

Capitalists may use their profits for productive investment or luxury consumption, or they can lend their profits to the workers, other capitalists, or the government for either consumption or investment. If a capitalist lends money to consumers or the government in exchange for future interest payments, from the capitalist point of view, the money constitutes "assets" that promises future returns. As far as the individual capitalist is concerned, it makes no difference whether the "rate of return" is based on productive investment or investment in financial assets.

Figure 3 shows the average rate of return on total invested assets for the American capitalists. The average rate of return is defined as the ratio of the total

pre-tax property incomes over the total invested assets. The total pre-tax property incomes include domestic and overseas corporate profits, capital component of the proprietors' income, personal rental income, and personal interest income (including interests received from the businesses, the government, and the rest of the world) less interest and dividend payments made to the rest of the world. The total invested assets include the business sector capital stock, household debt, government debt, and the net international investment position (i.e., the US total foreign assets less total foreign liabilities).[2]

In 1929, the US average rate of return was 13%. It fell below 6% in 1932 and 1933. From the 1950s to the 1960s, the average rate of return tended to increase, reaching near 12% by the mid-1960s. However, since the 1960s, it has tended to fall. The average rate of return fell below 8% during 2006–10.

Figure 4 shows the ratios of various productive and financial investments to the total property incomes for the US capitalist economy. From the 1950s to the early 2000s, the total productive and financial "accumulation" (the sum of the net business investment, investment in household debt, and investment in government debt) mostly fluctuated between 40% and 60% of the total property incomes. Subtracting the net capital inflows from abroad (the US net foreign investment has remained

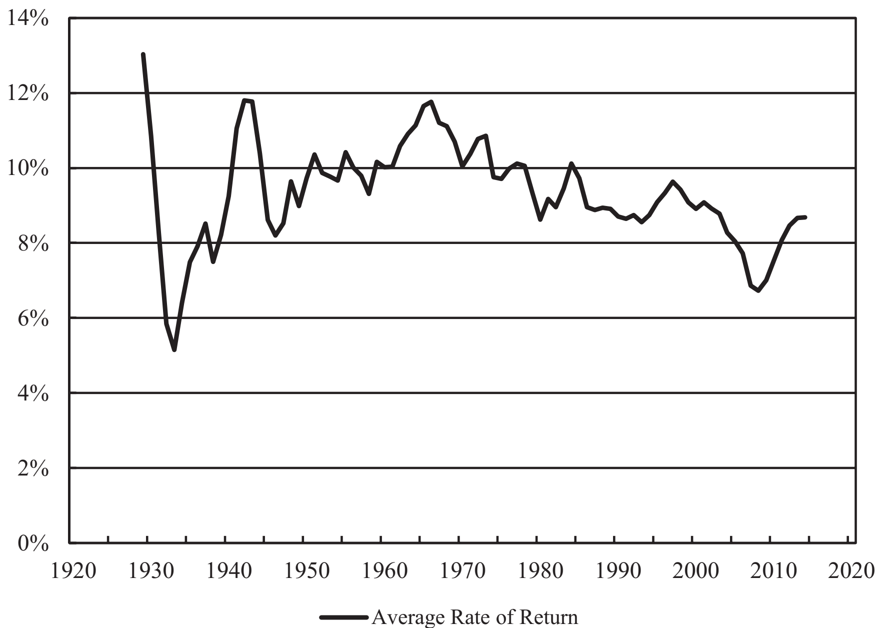

Figure 3 Average Rate of Return on Total Invested Assets (United States, 1929–2014)

Sources: Carter et al. (2006); the US Bureau of Economic Analysis (BEA 2015a, 2015b, 2015c, 2015d) and the US Federal Reserve (Federal Reserve 2015). See Appendix.

negative since the 1980s), the total productive and financial "accumulation" financed by domestic funds (as a ratio of the total pre-tax property incomes) averaged 38% in the 1990s, rose to 46% in the decade 2001–10, and fell to 29% during 2011–14.

In the 1950s and 1960s, net business investment accounted for 20%–25% of the US total property incomes, the investment in household debt was about 15%, and the investment in government debt was about 8%. By the decade 2001–10, the net business investment as a ratio of total property incomes fell to 11%, the investment in household debt averaged 28%, and the investment in government debt was another 28%. During the economic "boom" of 2003–06, household credit market borrowing surged to more than 40% of the total capitalist property incomes. During the "Great Recession," both business investment and household borrowing collapsed, capitalist assets "accumulation" was entirely absorbed by the purchase of government debt (which surged to more than 50% of the total property incomes during 2008–10).

Since the 1980s, the American capitalists have increasingly relied upon financial "accumulation" to substitute for productive investment in the pursuit of wealth expansion. The strategy of financialization has allowed the American capitalists to supplement profits from productive investment with claims on the future income

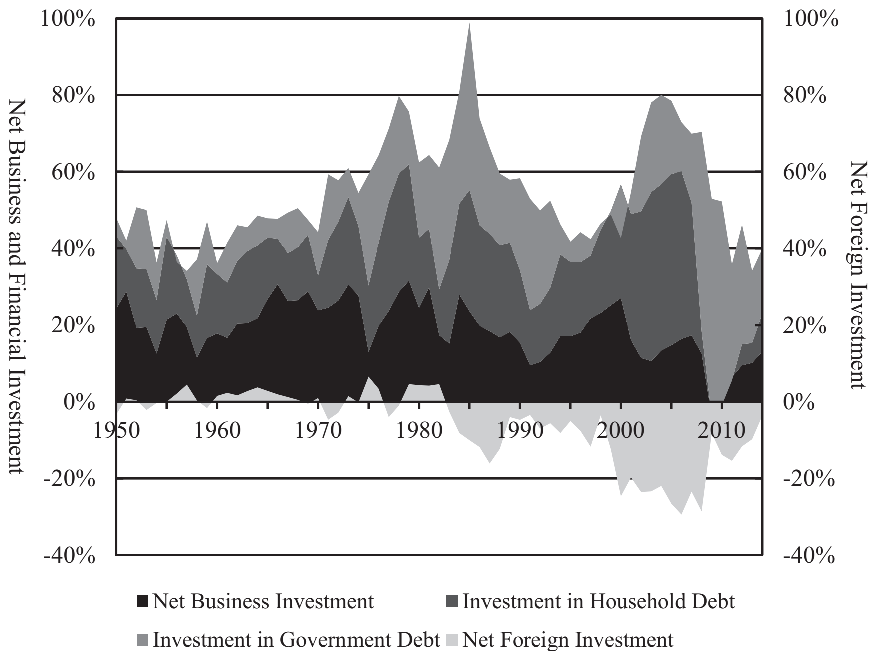

Figure 4 US Business and Financial Investment (as Ratio of Total Property Incomes, 1950–2014)

Sources: The US Bureau of Economic Analysis (BEA 2015b, 2015d) and the US Federal Reserve (Federal Reserve 2015). See Appendix.

flows of the government and the working-class households. This has allowed the American capitalism to increase the total profit despite having low ratios of productive accumulation, thereby raising the business sector profit rate.

The strategy of financialization requires massive increases in household and government debt, which cannot be sustained in the long run. Moreover, the very low ratio of productive accumulation (about 10% of the profit) implies a long-term capital stock growth rate of only 1.5% (given the long-term average business sector profit rate of about 15%). In the long run, persistent stagnation will seriously undermine the relative position of the American capitalism in the capitalist world system.

Limits to Growth?

Equilibrium profit rate is calculated using the profit's growth rate divided by the ratio of accumulation. The profit's growth rate equals the nominal profit growth rate less the inflation rate. In this case, the correct inflation rate is the growth rate of the capital stock price index (see note 1):

$$\text{Profit's Growth Rate} = \text{Nominal Profit Growth Rate} - \text{Capital Stock Price Index Growth Rate.}$$

Nominal profit (the profit measured in current dollars) equals nominal gross domestic product (GDP) multiplied by the profit share of GDP. In the growth rate format, the nominal profit growth rate equals the nominal GDP growth rate plus the profit share's growth rate:

$$\begin{aligned}
\text{Profit's Growth Rate} &= \text{Nominal Profit Growth Rate} - \\
&\quad \text{Capital Stock Price Index Growth Rate} \\
&= \text{Nominal GDP Growth Rate} + \\
&\quad \text{Profit Share Growth Rate} - \\
&\quad \text{Capital Stock Price Index Growth Rate} \\
&= \left(\begin{array}{l}\text{Nominal GDP Growth Rate} - \text{GDP Price Index} \\ \text{Growth Rate}\end{array}\right) + \\
&\quad \text{Profit Share Growth Rate} + \\
&\quad \left(\begin{array}{l}\text{GDP Price Index Growth Rate} - \text{Capital Stock Price} \\ \text{Index Growth Rate}\end{array}\right) \\
&= \text{Economic Growth Rate} + \text{Profit Share Growth Rate} + \\
&\quad \left(\begin{array}{l}\text{GDP Price Index Growth Rate} - \text{Capital Stock Price} \\ \text{Index Growth Rate.}\end{array}\right)
\end{aligned}$$

Nominal GDP growth rate less the GDP price index growth rate is the real GDP growth rate, or the conventionally defined economic growth rate. Thus, the profit's growth rate can be disaggregated into the sum of three factors: economic growth rate, profit share growth rate, and the "relative price effect" (differences between the GDP price index growth rate and the capital stock price index growth rate).

Table 2 compares the profit's growth rate in the United States and China and its contributing factors.

In the short term and medium term, the changes in the profit share and relative price often have significant impacts on the profit growth rate. In the long run, the profit share has tended to move within a limited range. From 1931 to 2014, the US profit share rate of change averaged –0.1%. From 1991 to 2014, China's profit share rate of change averaged 0.6%. On the other hand, the relative price effect may have a significant (but not decisive) impact on the profit growth rate even in the long run. From 1931 to 2014, the relative price effect lowered the US profit growth rate by 0.7%. From 1991 to 2014, the relative price effect raised China's profit growth rate by 0.9%.

Despite the more or less significant influences from the profit share and the relative price effect, the long-term average profit growth rate is primarily determined by the economic growth rate. From 1931 to 2014, the long-term average economic growth rate in the United States was 3.4%, and the long-term average profit growth rate was 2.6%. Excluding the volatile 1930s and 1940s, from 1951 to 2014, the long-term average economic growth rate in the United States was 3.2%, and the long-term average profit growth rate was 2.9%. From 1991 to 2014, the long-term average economic growth rate in China was 10.1% and the long-term average profit growth rate was 11.3%.

Capitalism has distinguished itself by its capacity to generate exponential economic growth over the long run. However, since the 1960s, the leading capitalist economies have suffered from progressively lower economic growth rates. Some leading mainstream economists now begin to wonder whether capitalism has entered into a time of long-term stagnation.

Robert Gordon, a leading neoclassical economist specializing in economic growth, makes powerful arguments that the US economy is likely to grow at dramatically reduced pace in the coming decades compared with the growth rates achieved in the 20th century. Gordon argues that the "third industrial revolution," which invented computers, Internet, and mobile phones, has nearly run its course. The overall economic impact of the "third industrial revolution" is far less important than the "second industrial revolution" (which invented electricity and internal combustion engines and had many spin-off inventions).

According to Gordon, in the future, we will have to face a world with fewer and less important innovations. Economic growth will be further hampered by several

Table 2 Profit Growth Rate and Its Contributing Factors, United States and China (Average Annual Rates of Change)

	Profit's growth rate (%)	*Profit share growth rate (%)*	*Relative price effect (%)*	*Profit's growth rate (%)*
United States				
1931–40	2.7	–1.0	–2.1	–0.4
1941–50	5.6	–0.4	–1.8	3.3
1951–60	3.6	–1.1	0.0	2.5
1961–70	4.3	–1.1	–0.0	3.1
1971–80	3.2	0.3	–1.6	1.8
1981–90	3.3	0.5	0.9	4.8
1991–2000	3.4	0.4	–0.0	3.8
2001–10	1.6	0.9	–0.8	1.7
2011–14	1.9	1.2	–0.2	4.6
1931–2014	3.4	–0.1	–0.7	2.6
China				
1991–2000	10.4	2.3	–0.1	12.9
2001–10	10.5	0.9	1.7	13.3
2011–13	8.0	–6.1	1.2	2.7
1991–2014	10.1	0.6	0.9	11.3

Sources: The US Bureau of Economic Analysis (BEA 2015a, 2015d) and various issues of *China Statistical Yearbook* (NBS 2015 and earlier years). See Appendix.

"headwinds": the declining share of labor force in the population, the stagnation of educational attainment, rising inequality, energy and environmental constraints, and heavily indebted households and government. Gordon argues that the US "potential" economic growth rate between 2007 and 2032 will slow down to about 1.6% (Gordon 2012, 2014a, 2014b).

Figure 5 shows the long-term growth of the US per capita real GDP and illustrates Gordon's argument with a hypothetical trajectory based on the historical trend.

According to the United Nations projection, the US population's annual growth rate will slow down to 0.6% between 2010 and 2050, and to 0.3% between 2050 and 2100 (UN 2012). As the US population growth rate slows down to 0.3% and the per capita real GDP growth rate falls below 1%, the long-term economic growth rate will slow down to about 1.3% or lower.

From the Marxist perspective, the stagnation of the capitalist economy results from the basic contradiction of capitalism. Moreover, in the 21st century, capitalist economic growth is subject to the fundamental constraints imposed by the planetary environment (Magdoff and Foster 2010).

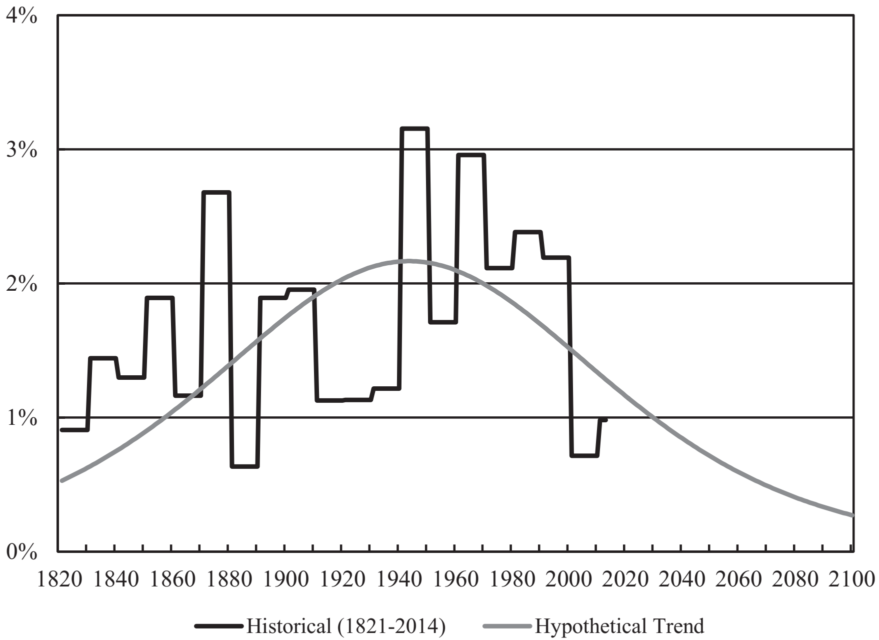

Figure 5 US Long-Term Growth of per Capita GDP (Average Annual Growth Rates, 1821–2100)
Sources: Maddison (2010) and World Bank (2015).

Falling Rate of Profit in the 21st Century

Historical experience suggests that the American capitalism probably needs an average profit rate above 15% to maintain economic and social stability. In the future, if the profit's growth rate slows down to about 1.3%–1.6% (a level consistent with the likely long-term economic growth rate in the coming decades), then the ratio of accumulation must not rise above 8%–10%. Such a low ratio of accumulation could seriously undermine the economic and geopolitical power of the American capitalism.

Even if the American capitalism succeeds in keeping the ratio of productive accumulation low while maintaining a sufficiently high profit rate in the business sector, individual capitalists may be strongly motivated to pursue expansion of wealth through financial accumulation. The unrestrained pursuit of financial accumulation may bring about major financial instabilities. Moreover, the excessive accumulation of financial assets will bring down the long-term rate of return on the total invested assets.

If the profit's growth rate is limited to 1.3%–1.6% and the broadly defined "ratio of accumulation" (net investment in productive and financial assets financed by domestic funds as a ratio of the total pre-tax property incomes) stays around 30%, then the average rate of return on the total invested assets will fall toward 4%–5% (1.3% / 0.3 = 4.3%; 1.6% / 0.3 = 5.3%). This would be even lower than the rate of return at the depth of the Great Depression.

The American capitalism may choose to keep both the productive and the financial accumulation ratios low and spend the bulk of the capitalist profit simply on luxury consumption. However, by its very nature, a capitalist economy cannot plan the socially average ratio of accumulation and consumption. Individual capitalists are both strongly motivated and compelled by the market competition to pursue wealth expansion.

If the capitalist class does manage to keep the accumulation ratio at no more than 10% for a prolonged period of time, it will deprive capitalism of a major ideological justification: the idea that the concentration of wealth in a small group of capitalists is socially necessary because it helps to generate economic growth and technological innovation. To the extent that this is no longer the case, the capitalist class degenerates into a purely parasitic class exploiting the great majority of the society without generating any tangible social benefits. Capitalism will face a major legitimacy crisis that may lead to its political demise.

In the 21st century, global ecological crisis has emerged as the overwhelming crisis confronting the humanity. To achieve global ecological sustainability, it is necessary to reduce the human material consumption and environmental impact to levels consistent with ecological constraints. This is likely to require zero or negative economic growth in the wealthy capitalist economies (Foster 2011).

However, ecologically required "de-growth" is fundamentally incompatible with the basic laws of motion of capitalism. The analysis of this article suggests that the capitalist economy needs a certain level of profit rate to maintain economic and social stability, which in turn requires a certain level of economic growth rate (given the ratio of accumulation). Capitalism cannot possibly operate with zero or negative economic growth rate over prolonged periods, which implies a zero profit rate in the long run.[3]

Humanity is confronted by the following alternative. Either, the capitalist system will continue to exist and operate, leading to global ecological catastrophes. Or, the global working classes and other oppressed people will have to bring about fundamental social changes to achieve ecological and social sustainability.

Either way, the "law of the tendency for the rate of profit to fall" will eventually be validated.

Appendix: Data Sources and Construction

United States

The US labor income, capital income (total profit), indirect taxes (taxes on production and imports less subsidies), and depreciation (consumption of fixed capital) are from *The National Income and Product Account Historical Tables*, Table 1.10 (BEA 2015d).

The proprietors' income includes both labor income and capital income. There are several commonly used methods to split the proprietors' income between labor and capital. The first is to assign fixed weights to labor and capital income (with labor often assigned a weight of two-thirds and capital assigned a weight of one-third). The second is to assume that the self-employed workers earn the same wage rate as the employees in the rest of the economy. The third is to assume that the capital stock in the proprietor sector earns the same rate of return as in the corporate sector. The fourth is to assume that the labor and capital income share in the proprietor sector is the same as in the rest of the economy (Giovannoni 2014; Piketty 2015, 203–4). The different methods often yield similar results. In this article, I simply assume that the labor income is 70%, and the capital income is 30% of the US proprietors' income.

The US labor income and capital income are defined as follows:

$$\text{Labor Income} = \text{Compensation of Employees} + 70\% \times \text{Proprietors' Income}$$

$$\text{Capital Income (Total Profit)} = \text{Net Operating Surplus of Private Enterprises} - 70\% \times \text{Proprietors' Income}.$$

The net operating surplus of private enterprises is the sum of corporate profits, proprietors' income, net interest payments, rental income, and net business transfer payments.

The business sector net stock of fixed assets is from *Fixed Assets Tables*, Table 6.1 (BEA 2015a).

In Table 1, the "ratio of accumulation" is defined as the ratio of the business sector net fixed investment over the total profit. The business sector net fixed investment is the difference between the business sector net investment (BEA 2015d, Table 5.1) and the change in private inventories (BEA 2015d, Table 1.1.5).

The total pre-tax property incomes are defined as the sum of corporate profits, capital component of the proprietors' income, personal rental income, and personal interest income less interest and dividend payments made to the rest of the world.

Corporate profits (including domestic and overseas profits) are from BEA (2015d, Table 1.12). Proprietors' income, personal rental income, and personal

interest income are from BEA (2015d, Table 2.1). Interest and dividend payments made to the rest of the world are from BEA (2015b, Table 1.1).

The total invested assets are defined as the sum of the business sector capital stock, household debt, federal government debt, municipal securities, and the net international investment position.

The business sector capital stock is from BEA (2015a, Table 6.1). Household debt, federal government debt, and municipal securities from 1929 to 1944 are from Carter et al. (2006, Table Cj870–889). Household debt, federal government debt, and municipal securities from 1945 to 2014 are from *The Financial Accounts of the United States* (Federal Reserve 2015).

The net international investment position from 1929 to 1975 is calculated from Carter et al. (2006, Table Ee23–26). The net international investment position from 1976 to 2014 is from BEA (2015c, Table 1.1).

In Figure 4, the business sector net investment is from BEA (2015d, Table 5.1). Household sector credit market borrowing, federal government credit market borrowing, and borrowing by municipal securities are from Federal Reserve (2015).

The US net foreign investment equals the US net acquisition of foreign financial assets less the US net incurrence of foreign liabilities. The US net acquisition of foreign financial assets and the US net incurrence of foreign liabilities are from BEA (2015b, Table 1.1).

China

All the Chinese economic data used in this article are from *China Statistical Yearbook*, various issues (NBS 2015 and earlier years).

China's total profit (capital income) is defined as GDP less the labor income, indirect taxes, and depreciation of fixed capital:

Labor income is the sum of total wages of urban non-private sector employees, total wages of the urban private sector employees, estimated total wages of the informal sector workers, the rural residents' "entrepreneurial income," and estimated employers' contribution to social security fund and other employee benefits.

Indirect taxes are calculated as the difference between the government sector's total tax revenue, and the business and individual income taxes.

Depreciation of capital is estimated using the data from the tables for "GDP by Income Approach by Province."

The business sector capital stock is estimated using the perpetual inventory method, which defines the capital stock as the cumulative net investment in all previous years:

$$K_T = K_{1990} + \sum_{t=1991}{}^{T}\left(NI_t\right).$$

K_T is the real capital stock in year "T." K_{1990} is the initial real capital stock in 1990. NI_t is the real net investment in year "t," and "t" is any year from 1991 to year "T."

The business sector net fixed investment is the difference between the business sector fixed capital formation and the depreciation. The business sector fixed capital formation is estimated using the total economy fixed capital formation and data from China's "flow of funds accounts" tables. The business sector depreciation is estimated using the total economy depreciation and data from China's "input-output tables."

The initial real capital stock in 1990 is estimated using the depreciation in 1990 and assuming a depreciation rate of 7%.

After the real capital stock is estimated, the nominal capital stock (the capital stock in current prices) is estimated by multiplying the real capital stock with the fixed investment price index.

Notes

1. In Figure 1, the equilibrium profit rate is established at the intersection of the profit's growth rate and the capital stock growth rate. The capital stock growth rate equals the nominal capital stock growth rate less the growth rate of the capital stock price index. Thus, the profit's growth rate has to be defined as the nominal profit growth rate less the growth rate of the capital stock price index. If the nominal profit is deflated by some other price index (such as the GDP price index or the consumer price index), the profit's growth rate cannot be directly compared to the capital stock growth rate.
2. As is stated above, while household debt and government debt are financial liabilities for the households and the government sector, they constitute financial assets from the point of view of capitalist financial investors.
3. In the long run, zero or negative economic growth rate implies zero or negative profit growth rate. In Figure 1, this can be represented by a profit growth rate line that either overlaps with or stays below the horizontal axis, implying a zero profit rate.

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THE GREAT RECESSION IN THE US FROM THE PERSPECTIVE OF THE WORLD ECONOMY

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Abstract: In this article, the economic crisis from the US perspective is analyzed, using a Marxist approach. As the so-called *Great Recession* constitutes a general crisis of the capitalist economy at world level, this article intends to provide an analytical framework to explain it from the profitability of capital point of view, while emphasizing the meaning of the real estate bubble and the placement of the US economy in the world system. In doing so, an additional objective of this article is to provide elements to reveal the limitations of the conceptions of the theory of the crisis based on income distribution, finance, neoliberalism, and generally any aspect outside the core of the process of capitalist valorization as the key explaining factor.

Key words: profitability; accumulation; economic crisis; US economy; Marxist theory

Introduction

In this article, we analyze the economic crisis of 2007–09 in the US from the perspective of its place in the world economy, using a Marxist approach. Unlike other analyses on the causes of the crisis and on the US economy, this text (1) theoretically characterizes the Great Recession (GR) and the implications that the place of the US in the world capitalist system has for the study of the crisis; (2) the meaning of the housing bubble is exposed in order to identify its impact on capital accumulation and the profit rate; (3) profitability is studied by using different indicators, both the rate and the mass of corporate profits; and (4) the characteristics and shortcomings of the profit income recorded in the System of National Accounts (SNA) are explained.

The analysis of an economic crisis requires reconciling the level of abstraction of the theory of crisis with the more concrete phenomena pertaining to the current

model of accumulation. Thus, the specific aspects of the GR lie within three interconnected phenomena: (1) the absence of a truly intense accumulation process in the preceding cycle (2003–07), with implication in the composition of capital; (2) the existence of a speculative bubble associated with the most dynamic sector of investment, real estate, which led to an increase in private indebtedness; (3) the regressive pattern of income distribution; and (4) geographical and sectorial imbalances. These features pose a challenge to a characterization of the crisis from the perspective of Marx and its general laws enunciated in *Capital* (Marx [1867] 1996, [1894] 1998).

However, I think that the Marxist approach in fact explains not only why these kinds of particularities arise from the inner tendencies of the mode of production but also the reasons of opposing explanations, even that nowadays most of the Marxist authors have rejected the "Law of the tendency for the rate of profit to fall" (LTFRP) as the foundation of the GR (see A. Freeman 2010; Mateo 2013). Therefore, a complementary aim of this article is to contribute by linking the above-mentioned facts on distribution, finances, etc., with the general laws of motion of capitalism, showing that *the Marxist theory of crisis* is appropriate to characterize the GR.

In this sense, one of the implications of this type of approach lies in the distinction between the way the phenomena appear (and are quantified in the SNA) and its ultimate foundations. In reality, it is not entirely possible to make a quantitative demonstration of our Marxist explanation for the crisis, but at least to make "approximations" that combine qualitative reasoning with quantitative aspects. Given that, we harmonize the theoretical analysis with data from the US economy.

To set a time frame start for the beginning of the crisis the NBER is used, so the growth phase lasted from November 2001 (2001Q4) until December 2007 (2007Q4), while the crisis ended in June 2009 (2009Q2) (NBER, 2010).[1] This article will focus on the US corporate business sector, which concentrates the basic tendencies of the capitalist production.

The article is organized in two sections. First, we start by characterizing the crisis. Then, we highlight the questions related to the US economy and its place in the capitalist world system, while in the last part of the section several theoretical aspects related to the real estate bubble are explained. Second, we analyze the dynamics of capital accumulation in the US economy, followed by addressing the emergence of the crisis, whose particularities require some comments on profits, crisis, and National Accounts in the context of the GR in the last part.

Elements for the Analysis of the World Crisis

The purpose of this section is to show the relationship between the Marxist theory of the crisis and its application to a specific area (US economy) and the current historical moment.

Theoretical Characterization

There are wide discrepancies in the diagnosis of the current crisis between Marxist authors. Briefly, we can point out the three main explanations and where the source of the contradiction may lie.[2]

First, insufficient profitability and its tendency to fall as the starting point, with controversies surrounding the measurement of the stock of capital at replacement or historical cost, complemented with (only) some references to the mass of profit. Second, a financial crisis, usually associated with neoliberalism, in which finances would have deteriorated the "net" profitability. And third, an imbalance between production and demand, although the source of the contradictions can be located in the productive sphere ("monopoly-capitalism" current of the *Monthly Review*) or in the insufficient demand generated by low wages (underconsumption).

Taking these discussions into account, it is our idea that the crisis that starts at the end of 2007 is, in the first instance, a crisis of capitalism derived from the general laws of accumulation at a world level (Roberts 2009; A. Freeman 2010; Carchedi 2011; M. Smith and Butovsky 2012), and more specifically, based on an insufficient capacity to generate surplus value. It thus expresses a growing conflict between the existent potential for development of the productive forces and the capitalist framework of the social relations of production (Arriola 2011). Therefore, it corresponds with the general guidelines expressed by Marx ([1894] 1998), although with important particularities from the current historic moment.

On the one hand, this crisis, while systemic, is a crisis of the global cycle of capital valorization, as it affects its different forms of existence (productive, commercial, and financial) at a great scale and intensity. Given the geographical extension of this valorization cycle, it means a worldwide crisis from the third trimester of 2008.[3] This is reflected in the kind of restructuring necessary for the recomposition of profitability conditions as to boost a new growth wave. Therefore, it is not a mere cyclical downturn. On the other hand, the extent of the GR implicates that in the last instance, it constitutes a phenomenon derived from the LTFRP, that is, a crisis based on the value sphere which is manifested, but in a contradictory way, in the rate of profit.

In quantitative terms, the profit rate (r) relates the surplus (profit) (p) and the stock of capital (K): $r = p / K$, "p" being the driving force of accumulation, given that the investment depends on profit, $I = f(p)$, and is the source of economic growth (GDP $\approx Y$). So, $p \rightarrow I \rightarrow Y$. In order to maximize profit, the capitalist wishes to reduce costs, and therefore to grab a larger amount of surplus labor. To this end, it should increase the labor productivity $((\pi = Y)/(L))$, which in general demands an increase of the fixed stock of capital (K) per worker (L): $\pi = f(K/L)$. The result is a tendency to an increase in the capital-labor ratio ($\theta = K/L$). Given

that (abstract) labor is the source of value, if "θ" increases more than "π," what can be named the "productive efficiency of investment (PEI)" ($PEI = \pi / \theta$), then the capital productivity (Π_K)[4] or maximum profit rate (p_{max}) decreases if it is not offset by the price ratio (P_Y / P_K), of the product and capital, respectively.

$$\Pi_K = \frac{Y}{K} = \frac{\pi}{\theta} \cdot \frac{P_Y}{P_K}.$$

In turn, the profit rate depends on the product-capital ratio and on the profit share in total income ($\beta = p / Y$), as well as on the profit margin on wages ($\pi - w$) reached by means of mechanization ($\theta \rightarrow \pi$), in case the different price deflators considered share the same dynamics (P_Y, P_K, and P_C—consumer price index).[5]

$$r = \Pi_K \beta.$$

$$r = \frac{Y - W}{K} = \frac{YP_Y - wP_C}{\theta P_K} \Rightarrow r = \frac{\pi - w}{\theta} \Leftrightarrow P_Y = P_C = P_K.$$

Analytically, we start from a global perspective because the crisis in the US is the materialization at national level of a world capitalist crisis. Thus, the world capitalist economy as a whole transcends its constituent parts, meaning the level in which "the laws of capitalism develop in a more complete and concrete manner" (McNally 2009, 43–44). Although the participation of the US economy in the world GDP has decreased from 31% to 23% between 2000 and 2010 (IMF 2014), its qualitative importance goes beyond that. Its central position in the capitalist system implies taking into account the difference between the mass of the value internally generated and the mass of the value that is taken from others (J. Smith 2010). This difference derives from the international movements of capital, which redistribute the surplus among the different areas, and which also result in the extraordinary indebtedness capacity of the US economy, incentivized in its turn by the speculative dynamic of the real estate bubble. Between 2003 and 2008, the US has received from overseas a total amount of capital inflow equivalent to between 7% and 15% of GDP, and generated a capital outflow between 3% and 10% of GDP,[6] so this favorable difference has allowed the US to compensate the current account deficit of 4%–5% of GDP, mainly generated by a deficit on the balance of trade (Bureau of Economic Analysis [BEA] 2012). Since the Southeast Asian crisis of 1997–98, in return, the periphery has accumulated general trade surpluses, which financed the net capital flow toward the great financial centers (Wall Street) in the form of portfolio flows and reserve accumulation.

The US economy has a relatively secured demand for its currency, which allows this country to manage a large portion of the world's savings and, through it, generate a downward pressure on its interest rates. Meanwhile, the transnational corporations can finance investment projects in the rest of the world (Schwartz 2009) and acquire a large amount of imports at lower prices. The capacity to externalize certain parts of the value chain, paired with the cheaper import of different goods, allows for reducing the cost of the elements of constant capital and the labor force, which has a positive impact on profitability (Broda and Romalis 2008; Milberg 2008; J. Smith 2010). That is, the US economy has more possibilities than others to activate mechanisms to counter declining profitability by way of lowering production costs, access to goods already produced, and capital to invest.

In this sense, such clarification is useful from the perspective of the implicit criticism of other conceptions of the crisis, which is largely explained by (1) extrapolating the phenomena that appear in the SNA of an economy, usually the US, without previously placing it on an analysis of world capitalism as a whole. In this case, it seems that the problem would be an excess of profits resulting from the lack of demand, in turn caused by a regressive income distribution; and (2) not considering the determinants of speculative phenomena such as the housing bubble.

Background and Framework

The identification of the specific features of the crisis in the US economy requires exposing some elements of the period from a global perspective. Chronologically, the GR can be pinpointed from two types of contribution-related antecedents. First, the phase that starts after the crisis of 1970s, a long cycle characterized by the progressive implementation of neoliberal policies. Second, the period of expansion of 2003–07 immediately preceding the crisis and related to the previous phase of intense accumulation associated with the dot-com bubble.

In recent decades, there have been two types of expansion of the capitalist system that we should consider: one resulting from neoliberal policies and the other from the disappearance or transformation of the socialist field, together with changes in other peripheral economies. Thus, capital has been able to dispose of a large number of material assets for capitalist production at low cost, while around 1.5 billion people were incorporated into the economically active population (R. Freeman 2004; IMF 2007) with low wages. The repercussions we should consider in the analysis of the crisis are diverse:

1. A pressure toward moderation of technical change, since the increase in labor meant a fall of around 60% of the capital-labor ratio in the early 2000s according to R. Freeman (2004).

2. The decrease of investment costs, expressed in US dollars, to the extent that the center of gravity in quantitative terms of global capital accumulation has shifted to the periphery (De Angelis and Harvie 2008), where the investment in relation to GDP was 27% on average between 2003 and 2007 (36% in Asia), compared with 23% in central economies (IMF 2014).

This extension of the capitalist mode of production at global scale has acted as a counteracting force on the decrease in profitability appropriated. But contradictorily, its contribution to improving the value-producing capacity has been insufficient, making it difficult to counter the underlying problem of valorization. These two aspects laid the basis for the growth of speculative episodes and regressive redistribution of income.[7] Despite the wave of technological transformation in recent decades, the so-called third industrial revolution developed from the use of information as a productive force (the information and communication technology [ICT]) and organic life as basic raw material (biotechnology, new materials development, etc.), productivity gains in terms of surplus value not only have not increased but have also shown an alarming drop since the 1960s in developed areas (see Arriola 2011; Kalogerakos 2013, Table 1; AMECO 2014; BLS 2014). To the extent that productivity does not significantly improve, it poses an impediment to the reduction of production costs, to what we add the problem associated with the energetic base of the accumulation model, characterized by the asymmetry between producing and consuming areas. That is how the contradiction between the development of productive forces and the capitalist relations of production expresses themselves (Arriola 2011).

Speculation and the Housing Bubble

The speculative bubble mainly related to the housing market has been the core of economic growth. From the Marxist approach, this boom is not explained as a phenomenon of psychological or institutional nature. On the contrary, first it must be characterized by its social content linked to capital valorization, and second, by the peculiarities of the current situation.

The first hypothesis we propose is that, given the speculative instinct being always present in a system whose driving force is profit maximization, the base of the central role of the housing bubble in the recent cycle of economic expansion is a problem of underlying profitability. In other words, a relatively small amount of surplus generated with respect to the volume of capital stock that has to be used for continuing accumulation. At the same time, this surplus in absolute terms implies extraordinary amounts of capitals in search of valorization (Guerrero 2008; Kalogerakos 2013).

The housing market has a number of features that makes it suitable for generating a bubble: housing is a general consumer good with a fairly inelastic demand and a price tag that requires long-term indebtedness, therefore generating a financial transaction. For this, it is very sensitive to interest rates. Furthermore, the central issue is that its production, unlike other commodities, greatly expands over time, and in the short term prices may be largely determined by demand and ground rent. These features, in the context of low interest rates due to sluggish investment and therefore of reduced profitability from Treasuries (Brenner 2009; Kliman 2011; Norfield 2012), together with the existence of these just mentioned large masses of profit-seeking valorization, contributed to turning this market into a very attractive source of profitability.

As the residential construction activity becomes the destination for investment, unlike other activities it does not lead to falling prices and overcapacity, at least at first. It attracts investment because prices rise and prices rise because more investment is attracted. Therefore, an imbalance between labor time and price (price-assets inflation) is generated. Since profitability arises from the increase in price of certain assets and not in the enlarge of surplus labor time by technical change, in this sense one can speak of "fictitious profits." Or in other terms, it could be made reference to a "profit upon alienation" stemming from a transfer between different circuits of income, from households to corporations (Shaikh 2016), as the counterpart of augmented profits by way of relative market prices are the increasing costs for households (less purchasing power) and rising debt (Mateo, forthcoming). Therefore, we have a model in which causality is apparently altered, leading to investment → price → profitability in the surface (see "The Emergence of the Crisis," pp. 195–199), and as such recorded in the SNA (see "Reflections on Profitability and Crisis," pp. 199–201).

This activity also generates significant externalities in the economy that allows it to serve as a driving force of the accumulation dynamics: supplies for construction, transport infrastructure, social services, business services, etc., that to a greater or lesser degree reach all social strata, even if with a deep asymmetry. But herein lays its own contradiction, as the housing bubble rests on an unstable and unsustainable long-term base. Access to new borrowers to finance the purchase of housing, whose price increases each year more than the population's income, is undermined by a wage regression, which in turn is the result of the limited increase of productivity, deepened in fact by this model. As the securitization process progresses, potential new borrowers are in worse labor conditions, which implies an intensification of financial activity and indebtedness. Consequently, the underlying profitability problem is manifested in a collapse of investment when it is not possible to keep paying mortgages and/or there are no new buyers. Thus, the crisis manifests itself as a problem of demand (wages) and associated with finance (debt), even if the real roots belong to the value-production sphere.

At the same time, other factors related to the economic conjuncture favored the speculative dynamics. First, the type of exit from the previous crisis of 2001–02. Given an insufficient capital destruction (Kliman 2011; M. Smith and Butovsky 2012), together with expansionary economic policies, many of the capitals that had generated the stock exchange bubble in the 1990s contributed to intensify the speculative process in real estate. Due to overcapacity, the over accumulation of the previous decade resulted in liquidity hoarding by enterprises. Second, deregulation decisions, as the government favored this process as a way to allow access to housing property to low-income groups.

In addition to these elements, there is a crucial aspect related to the aforementioned spatial configuration of capitalism: the proletarianization of a large contingent of labor in areas directly incorporated into the capitalist accumulation dynamics, such as China. Migration from the countryside to the city and from the periphery to the center all around the world has prompted an extraordinary boom in urbanization in recent decades, intensified by deregulation policies (Harvey 2010; OECD 2013; Tapia 2013), free trade agreements that have driven the country labor out, or the imbalances followed by the establishment of currency areas in less advanced countries (see the Euro zone) that have experienced intense speculative dynamics (Spain). Therefore, the housing bubble is also the result of social, geographical, and institutional changes experienced by capitalism at world scale (Harvey 2010).

But it also happens that this contradiction manifests as too much surplus and too little demand, when in fact just the opposite is found in a double sense, not in the distribution sphere but in production, and not because of too much surplus but because it is reduced in relative terms. And also, all of it is magnified by the underlying difficulties previously alluded by the poor results of investment in the development of productivity.

Accumulation and the Crisis in the US

Once this set of general issues to consider has been exposed, we approach below the main features of the accumulation process in order to characterize the crisis in the US economy.

Capital Accumulation

Accumulation and economic growth in the US have been relatively lackluster. The upturn phase has been brief (2003–07), with relatively low rates of GDP growth when compared with the postwar boom and with large imbalances, which have determined the modalities of manifestation of the crisis. The fixed investment to

GDP has been below 20% of GDP, but the most dynamic component was the residential investment, which represented more than a third of private fixed investment and 6% of GDP at the end of the cycle. The investment behavior in turn is reflected in the stock of capital (*K*), with an exceptionally low growth rate, at 2% annually during the boom preceding the crisis (Table 1).[8] In addition, the ability to generate employment has been reduced, just over 1% per year, which has translated into a low growth of the *K*/*L* ratio, with an annual average of 0.70%.[9]

This weakness in capital accumulation does not result, however, in stagnation of labor productivity, which increases by 1.76% in 2003–07. Although the rate of increase is lower than other phases, it turns out to be more than twice the rate of increase in *K*/*L* (1.76% vs. 0.70% annual average). Possibly, "much of the increase in productivity was due then to the intense incorporation of computer technology—both software and hardware—that had occurred in the nineties" (Astarita 2008). The overinvestment, together with the high indebtedness of the previous decade, allowed in the last cycle for the exploitation of the idle capacity originated from the 2001 recession, giving way to better understand the behavior of labor productivity with respect to the ratio *K*/*L*.

This explains the good performance of the PEI (π/θ). Historically, US labor productivity has grown by more than the rate of mechanization, just as the total output has increased more than the stock of capital (Table 1). One of the

Table 1 Historical Evolution of the Accumulation Process in the US (Average Annual Growth Rates)

Period	*K*	*L*	*Y*	*K/L*	*Y/L*	*Y/K*	*w/L*
1950–60	3.25	1.16	3.98	2.06	2.79	–0.28	1.41
1960–70	4.31	2.06	4.90	2.15	2.77	0.66	0.13
1970–80	3.90	2.29	3.55	1.57	1.23	–1.87	–1.90
1980–90	3.24	1.89	3.35	1.38	1.43	0.47	–1.09
1990–2000	3.35	1.99	4.09	1.25	2.05	0.70	–0.04
2000–2010	1.73	–0.41	0.88	2.35	1.30	–2.16	1.25
1982–90	3.13	2.07	4.00	0.53	1.36	1.43	–1.81
1991–2000	3.49	–6.46	4.19	0.91	2.18	1.02	–0.31
2002–07	2.00	1.18	2.96	0.70	1.76	–1.13	0.24

Source: BEA (2014b, NIPA; 2014a, FAT). See also the Appendix.

Note: K = current-cost net stock of private non-residential fixed assets, constant prices; L = full-time equivalent employees in private enterprises; Y = net value added of domestic corporate business, constant prices; W = compensation of employees; w/L = in constant prices; BEA = Bureau of Economic Analysis; NIPA = National Income and Products Accounts; FAT = Fixed Assets Tables.

consequences of the neoliberal economic restructuring that began in the 1970s–1980s was to make possible the reconfiguration of the accumulation process that for the US meant the ability to recover levels of PEI over the next two decades. While the capital stock has had a successful productive efficiency at constant prices in the 2003–07 boom, as it enabled the product to grow over 148%, the rate of accumulation was still considerably low. Thus, the ability of capital to appropriate new value is hampered by the low rate of relative increase of the source of its own surplus (abstract labor from the labor force), even if such PEI is maintained at high levels, a question addressed in the next point.

The Productivity of Capital

The relative hegemony of US results from its insertion into the progressive globalization of the production process and its associated financial relationships. The offshoring of certain lines of labor-intensive production, the role of ICT as well as new forms of production systems (like *just-in-time* and *lean production*) and the import capacity of various assets of the means of production facilitated by the strong dollar (see in this sense the depreciation of currencies from exporting undeveloped countries following crisis in the periphery), allowed productivity gains with relatively small amounts of fixed capital investments, so the productivity of capital (*Y/K*) experienced a rise, while the *K/L* ratio was not greatly increased (see Mohun 2009; Basu and Vasudevan 2013).

In the last growth phase, however, despite this level of efficiency with a higher increase of labor productivity than the *K/L* ratio, the productivity of capital paradoxically falls by –1.13% per year (Table 1), unlike what happened in previous decades and indeed during the 1990s expansion. Interestingly, this fall of PK coincides with an increase in the same ratio (*Y/K*) but at constant prices (as explained in the previous section, "Capital Accumulation," pp. 189–191), which requires incorporating the evolution of price deflators (Figure 1).

Up until the 1960s, the price index of capital stock was increased by more than the total output and business deflators. From 1981 to 2003, in contrast, a profound shift occurred, explicable by changes in world capitalism and the way the US has developed its hegemonic position. We have observed a relative cheapening of capital with few and insignificant exceptions (1988, 1993–95, 2002), where the differences in growth rates do not even reach 0.5 percentage points. This dynamic meant an important countertendency to declining profitability because it allowed to relatively reduce the cost of new investments, which accountably appears as a lower level of investment (McNally 2011).

But between 2004 and 2006, the GDP price index grew between 2.7 and 3.4 percentage points less than that of the stock of capital. During 2002–07, the capital stock deflator increased by 23.18%, while the total output deflator increased only

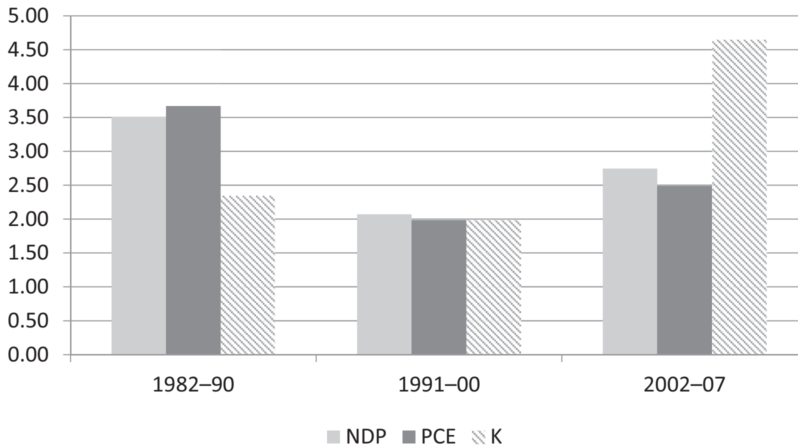

Figure 1 Price Indexes of Net Domestic Product, Consumption Expenditures, and the Stock of Capital: Annual Average Rate of Growth (%)

Source: BEA (2014b, NIPA; 2014a, FAT). See also the Appendix.

Note: NDP = net domestic product; PCE = personal consumption expenditures; K = net stock of private non-residential fixed assets; BEA = Bureau of Economic Analysis; NIPA = National Income and Products Accounts; FAT = Fixed Assets Tables.

by 12.85%, that is, one point more than the value added by the corporate sector. This offsets the larger increase of GDP (12.10%) than capital stock (10.49%) at constant prices, reflected in a fall of Y/K of 6.03%.

It is then possible to assess that in the last bull cycle, the means of production have become more expensive in relation to both the total output, particularly the consumer goods sector. It thus reveals a problem in the productive development of the means of production sector, in turn harmed by the depreciation of the dollar (Basu and Vasudevan 2013), which has resulted in the aforementioned decline in capital productivity. Therefore, the US economy has had a very weak rise of non-residential capital stock, and although it was relatively efficient, it could not avoid a fall in capital productivity, creating the framework for the crisis of profitability.

The Dynamics of Profitability

In this section, capital profitability is addressed through two approaches: the rate of profit (in relation to the stock of capital) and the mass of profits (real terms).

From a long-term perspective, it is observed that the rate of profit has not generally achieved in recent decades the levels prior to the crisis of the 1970s (Figure 2). Between 1970 and 2011, the ratio for the corporate sector was found to be 27%–30% lower than the average for 1945–69.[10] Instead, it has achieved higher rates than those recorded in the decades after the 1970s. The maximum rate of

profit for corporations after taxes was only surpassed in 1968, if capital stock at replacement cost is taken, or 1978 for historical cost, while the profit rate calculated with the surplus (net value added minus compensation of employees) was not as high since 1973 and 1984, respectively. Also, the evolution of profitability does not show a downward trend in the short growth cycle of 2003–07. After a minimum in 2001, these rates reached a peak in 2006, at which time we observe a very fast descent, falling 44%–45% in 2 years (2006–08).[11]

The mass of profits is also a key variable in the cycle of accumulation. In this regard, Marx ([1894] 1998) noted that the accumulation continues its course not in proportion to the rate of profit but in proportion to the mass of profits. When this volume stagnates or descends, it increases the absolute overproduction of capital, that is, overproduction of means of production while they act as capital. Using the mass of profits is also important as it is not possible to define a determined level of profit rate that is appropriate to boost investment.

In Figure 3, the evolution of corporate profits and their components at constant prices of 2009 is shown. The bull cycle starts in 2001Q3, when the corporate surplus recorded a minimum of US$848 billion. The maximum level is reached in the third-quarter of 2006, with US$1,754 billion. From that moment, and until 2008Q4, the corporate surplus decreases, although the profits of financial institutions begin their fall with a quarter in advance. However, the net balance of inflows and outflows of profits with the rest of the world registers positive balances. Even

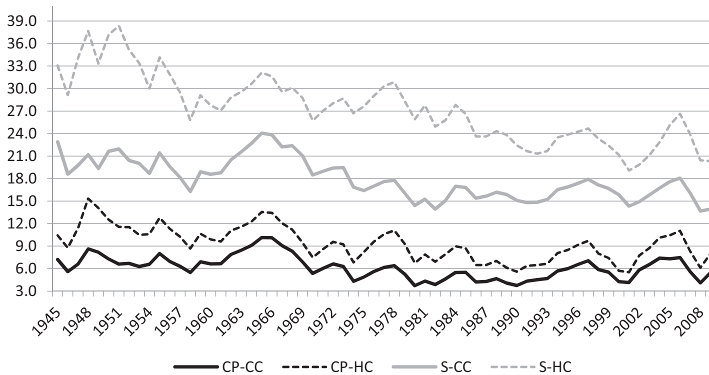

Figure 2 The Profit Rate in the Long Term (1945–2009): Different Expressions of the Surplus of Corporations with Respect to the Capital Stock as a Percentage

Source: BEA (2014b, NIPA; 2014a, FAT). See also the Appendix.

Note: Profit rate is profit/stock of capital. CP = corporate profit; S = surplus (net value added minus compensation of employees of corporate business sector); CC = current cost; HC = historical cost (both CC and HC for the stock of capital); BEA = Bureau of Economic Analysis; NIPA = National Income and Products Accounts; FAT = Fixed Assets Tables.

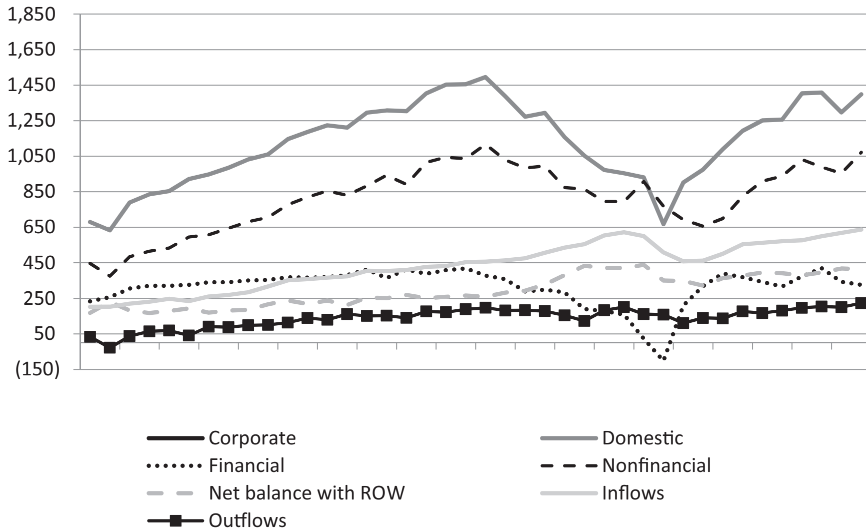

Figure 3 The Mass of Profits: Billions of US$ at 2009 Constant Prices

Source: BEA (2014b, NIPA). See the Appendix.

Notes: Structure of corporate profits with IVA and CCA: domestic (financial and non-financial) and ROW (inflows/receipts and outflows/payments). BEA = Bureau of Economic Analysis; NIPA = National Income and Products Accounts; IVA = inventory valuation adjustment; CCA = capital consumption adjustment; ROW = rest of the world.

as domestic benefits descended throughout 2007, the reception of capital intensified its counteracting effect over the deterioration of domestic profitability, and from the second quarter of 2007, and throughout that year, it records quarterly increments of over 10%.

Between 2006Q3 and 2008Q4, corporate earnings fell by an average 6% per quarter, reflecting the decline in the corresponding domestic sectors (–8.74%), partially offset by an increase of 2.72% of the external balance. The profits of a financial nature are those that show a more pronounced downward trend (77%), which would be 92% if we take as reference a quarter more in the beginning and at the end of the period (2006Q2–2009Q1). In fact, the last quarter of 2008, following the bankruptcy of Lehman Brothers, brings with it a collapse of the financial surplus of 536%.

In aggregated terms, during the profit expansion phase (from 2001Q3 to 2006Q3), the profit from domestic corporations increased by 199%, higher than that of non-financial (150%) and financial corporations (62%). Together with the 54% observed from the balance of receipts and payments with the rest of the world, it resulted in an increase of 106% of corporations' surplus. From 2006Q3 until 2008Q4, the

domestic surplus decreased by 55%, pushed mainly by financial corporations (−126%), given that the surplus decrease from non-financial institutions is less accentuated (–31%). As the external sector continued to contribute positively, the net surplus that enters the country increased up to 35%; therefore, the total surplus from corporations decreased by 42%. If the adjustments of inventory valuation (IVA) and capital consumption (CCA) are not taken into consideration, the evolution deepens the volatility. The profits from corporations and non-financial corporate businesses increase by 309% and 550%, and decrease by 73% and 55%, respectively.[12] Therefore, using the profitability levels of the mass and the rate of profit, it can be asserted that in general terms it has experimented a decrease of –40% between 2006 and 2008, which could be even greater if we do not take into consideration the external receipts of capital and the adjustments for IVA and CCA.

In Table 2, we observe a periodization according to that established by the NBER to determine expansions and recessions. The list of different expressions of the corporate surplus indicates that the rupture point occurs four quarters before the beginning of the crisis.[13] In the quarterly variation rates, only interests and the external capital balance from the rest of the world show a different evolution, while in terms of inter-annual variation, the peak would be reached between 2006Q3 and 2006Q4. Thus, the crisis comes preceded by a fall in the profitability of capital.

In the same table, we can verify the quarterly evolution of investment. The private fixed investment had an inter-annual increase of 2% during the growth period, which is equivalent to a sixth of the after-taxes profits from non-financial corporations. The decrease of the private fixed investment started in 2006Q2, after reaching its peak in the first quarter of this very year, or six quarters before the beginning of the crisis. Nevertheless, the non-residential investment continued to increase until 2007Q4/2008Q1, the moment in which it decreases by 20% until the last trimester of 2009. As a result, we observe that the profits from corporate businesses are debilitated around 4–5 trimesters before the non-residential investment starts falling. But the importance of residential investment and its link with profits, as well as the "late" fall in the non-residential one, require us to address in the next section the particular moment in which the crisis outbreaks.

The Emergence of the Crisis

The form under which the insufficient capacity to generate surplus value triggers the crisis demands taking into account the specifics of the model of accumulation, because the failure of continuing with investment relies on conjunctural factors (institutions, types of assets, external elements, etc.).[14] The housing bubble has generated a very particular relationship between investment and profitability, so the outbreak of the crisis requires integrating both the elements of the accumulation process of previous sections (pp. 189–192) with those of the asset bubble.

Table 2 Average Rates of Growth of the Mass of Profit and Corporate Investments (%)

Profits and investment	*2001Q3/2007Q4*	*Quarters with respect to 2007Q4*							*2007Q4*	*2007Q4/2009Q2*
		−7	*−6*	*−5*	*−4*	*−3*	*−2*	*−1*		
A. Quarterly rates of growth										
Profits										
Domestic corporate business										
Net operating surplus	1.28	3.55	0.88	3.39	−5.61	−5.76	2.23	−7.44	−5.86	−1.09
Net interest	0.34	17.63	12.81	8.03	8.23	6.15	8.50	12.28	12.90	−3.90
Corporate profits (1)	1.77	3.51	0.15	2.76	−7.19	−8.32	1.74	−10.57	−9.00	−1.27
Profits after tax	1.36	3.90	−0.94	2.23	−7.07	−13.60	3.99	−11.99	−11.18	2.32
Non-financial corporate business										
Net operating surplus	1.72	1.65	−0.72	6.87	−4.99	−2.76	2.28	−7.72	1.12	−3.31
Corporate profits (2)	2.70	2.62	−0.95	8.11	−7.44	−4.86	1.38	−11.94	−0.57	−5.02
Profits after tax	2.45	5.12	−3.02	8.97	−6.65	−8.12	3.63	−13.84	−1.65	−3.13
Financial	−0.82	5.25	2.58	−9.74	−5.26	−19.40	3.44	−5.02	−33.15	9.06
Rest of the world	3.85	3.42	2.57	−2.43	8.93	3.73	11.91	16.24	13.53	−4.81
Corporate profits (3)	2.27	3.49	0.51	1.96	−4.81	−6.29	3.64	−5.16	−3.42	−2.24
Investment										
Private fixed investment	0.51	2.09	−0.88	−1.02	−1.01	−0.18	0.26	−0.61	−0.87	−4.11
Non-residential	0.89	3.69	1.25	1.19	0.65	1.72	1.96	1.55	1.69	−3.29
Residential	−0.41	−0.93	−5.03	−5.58	−4.67	−4.56	−4.00	−6.37	−8.30	−7.09

Profits and investment	*2001Q3/2007Q4*	*Quarters with respect to 2007Q4*							*2007Q4*	*2007Q4/2009Q2*
		–7	*–6*	*–5*	*–4*	*–3*	*–2*	*–1*		
B. Inter-annual rates of growth										
Profits										
Domestic corporate business										
Net operating surplus	5.20	12.31	12.02	16.05	1.95	–7.21	–5.97	–15.82	–16.05	–51.09
Net interest	1.36	56.81	66.71	62.61	55.15	40.00	34.65	39.95	45.98	–53.90
Corporate profits (1)	7.26	12.17	11.29	14.71	–1.14	–12.44	–11.05	–22.58	–24.10	–51.27
Profits after tax	5.54	13.15	8.89	12.26	–2.22	–18.69	–14.64	–26.51	–29.76	–47.68
Non-financial corporate business										
Net operating surplus	7.07	13.22	6.67	19.25	2.46	–1.98	0.98	–12.80	–7.19	–53.31
Corporate profits (2)	11.25	17.96	9.52	25.34	1.70	–5.71	–3.49	–21.38	–15.54	–55.02
Profits after tax	10.17	22.87	8.29	25.88	3.70	–9.37	–3.15	–23.42	–19.31	–53.13
Financial	–3.26	–0.83	14.96	–8.32	–7.68	–29.30	–28.71	–24.98	–47.07	41.49
Rest of the world	16.31	2.00	5.82	–3.75	12.75	13.08	23.39	46.99	53.19	–17.89
Corporate profits (3)	9.39	10.50	10.41	11.54	0.96	–8.58	–5.73	–12.31	–11.03	–8.65
Investment										
Private fixed investment	2.06	5.55	2.99	0.35	–0.86	–3.05	–1.94	–1.53	–1.39	–15.44
Non-residential	3.61	7.54	7.34	6.66	6.93	4.89	5.63	6.01	7.10	–12.54
Residential	–1.62	1.78	–5.10	–11.37	–15.31	–18.41	–17.53	–18.23	–21.34	–25.49

Source: BEA (2014b, NIPA). See Appendix.

Note: 1 = NIPA 1.14 (11); 2 = NIPA 1.14 (27); 3 = NIPA 6.16 (1); BEA = Bureau of Economic Analysis; NIPA = National Income and Products Accounts.

The limits and contradictions of these dynamics were clear from the foundations of surplus generation process. In the business sector, the product per working hour only increased by 10% between 2003Q1 and the first half of 2006, total working hours increased by less than 5%, and real wages per hour by 4% (Council of Economic Advisers [CEA] B-49). Despite this regressive distribution of income, given that the participation of wages in the aggregated value of corporations fell by four points between 2003 and 2006 (BEA 2014b, NIPA, 1.14), the capacity to generate surplus was not in accordance with the peak of the mass of corporative profits that, after taxes, increased 27% until 2005Q3 and continued to increase until 2006Q3, when it represented 42% more than in 2003Q1.

The crisis arises when the net profit of enterprises is insufficient for the valorization of the existing stock of capital. But this general statement takes particular forms depending on multiple factors according to the model of accumulation, and so involving interests, taxes, wages, capital flows, indebtedness, as well as the institutional framework. In this case, the very need to preserve the role of the dollar required for the US government to maintain monetary stability has to be considered, so the rise in interest rates from mid-2004 (see CEA, Table B-73) had implications for increasing business costs, and also on investment and employment (CEA 2013), as it pushed down the capacity of absorption of this credit-driven demand.[15] Rather than a business profit-squeeze (but also), this was an indebtedness-squeeze, thus contributing to the fall in profitability. Although real unit labor cost remained controlled, when real wages stagnated from 2004Q4/2005Q1 (BLS 2014; CEA B-49), it began to undermine one of the foundations for the viability of this model, the so-called "price-effect," bringing a headlong rush toward loans with less guarantees.[16] As explained before, the connection between valorization and investment took on a particular form, assuming its manifestation in the demand (and financial) side as it became dependent on the indebtedness of housing buyers. Thus, the limits of the bubble were determined precisely by the factors that made feasible the continued demand for mortgage loans.

As shown in Figure 4, the residential investment reached its peak in 2005Q3, after growing 24% since 2003Q1. The housing price reached a maximum during the first half of 2006 according to four of five used indexes, and profits start falling shortly after (Table 2). The decrease of residential investment, therefore, precedes the decrease in the housing prices and the mass of profits, so we see *investment → prices → profits*. Between 2005Q3 and 2009Q2, the residential investment collapsed, with a sharp fall reaching 57%. Housing prices fell by 22%–23% between the peak and 2009Q2, pushing down the capacity of making profits through securitization and, thus, the whole set of activities linked to the construction sector. This is the reason non-residential investment started falling following the decrease in housing prices and profits, while the stock indexes started their fall later on, in

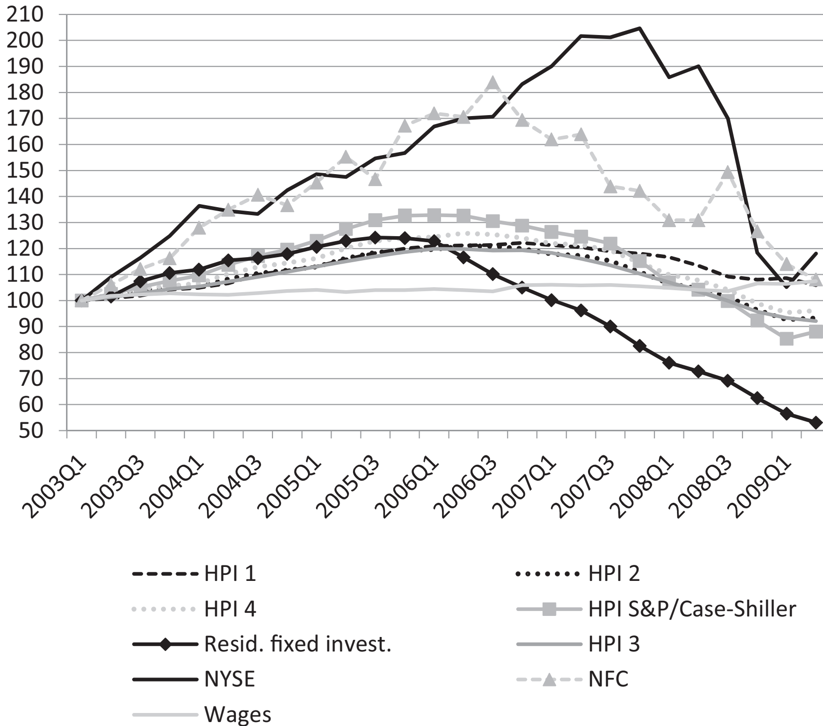

Figure 4 Evolution of Housing Prices and the Fixed Residential Investment: 2003Q1 to 2009Q2, 2003Q1 = 100

Sources: FHFA (2014), S&P/Case-Shiller (2013); BEA (2014b, NIPA, Tables 1.1.4, line 1 and 5.3.3, line 20); NYSE (CEA B-96); profits of NFC (BEA 6.16); Wages: Real compensation per hour in the business sector (CEA B-49).

Notes: HPI 1: all-transactions indexes; HPI 2/3: expanded-data indexes (index_nsa/sa); HPI 4: summary statistics for house prices (average price). Nominal prices deflated by price indexes for GDP. HPI = house price index; NYSE = New York Stock Exchange composite; CEA = Council of Economic Advisers; NFC = non-financial corporations; BEA = Bureau of Economic Analysis; NIPA = National Income and Products Accounts.

October 2007. In the case of the New York Stock Exchange (NYSE) composite, after a rise of 115% from March 2003, the drop reached 53% until March 2009 (see CEA B-96).

In other words, the outbreak of the GR occurs when the mechanism feeding the housing bubble could not continue to stay away from the real foundation of surplus value, that is, abstract labor, but manifested in the impossibility of finding new buyers.

Reflections on Profitability and Crisis

Having explained that the hypothesis sustained in this article makes reference to the underlying fall in profitability, it is true that a smooth decrease was not

observed during the growth period prior to the GR. Rather, it was an abrupt collapse explained by the specific traits of the accumulation dynamic, such as indebtedness and the speculative spiral. Nevertheless, we believe that the evolution of profitability shown in the SNA data does warn, but does not quantify in all its extent, the underlying profitability problem.[17]

We have just described the great capacity that the US economy has shown in appropriating income from other areas and profits obtained from the productive offshoring. But one relevant aspect is the existing relationship between the form adopted by the accumulation process and the accounting record of the macroeconomic magnitudes, especially profit. In the first instance, highly elevated corporate profits obtained during the expansion phase have been *apparent* or *fictitious* in the sense that it depended on the increment of the price of real estate and financial assets in relation to what we can establish, from the Marxist approach, as the real underlying value derived from the surplus productive capacity or, in other words, the social necessary labor time. This "price-effect" does imply, on the one hand, backward and forward sectoral linkages manifested in real valorization already recorded in the SNA, but also it originated transfers of income from the circuit of the house buyers, mainly the salaried class, toward capital. When the crisis emerges, however, they suddenly disappear, revealing their real problem of insufficient generation of surplus value. It happens, however, that the other side of the "fictitious" rise in profits during the boom is the stagnation or fall in wages during the crisis, to which it should be added the collective income transfer through the banking bail-out.

The increase of indebtedness is a by-product of an inflation-assets-driven model that does not greatly foster labor productivity (and wages), given that the "fictitious capital destroys the equality between income and the expenditure of value on which much Marxist analysis is implicitly premised." As it was mentioned, "fictitious capital can itself create forms of profit" (Jones 2013, 10), and that has happened in financial markets and the real estate activity (see Harman 2008; Jones 2013; M. Smith and Butovsky 2012).[18] Ultimately, if the surplus value cannot be created by changes in relative prices, but appropriation of profit did occur, someone else should pay. This is the reason of alluding to a transfer of income from other circuits that usually involve labor to capital.

As a consequence, an overestimation of profitability in the SNA occurred, to which capital gains and the state intervention should be added. When delinquency happened from housing buyers, the underlying assets depreciated. In this case, we can infer the profitability problem from other circuits of income, the expenditure that the government has taken to rescue several institutions or to avoid the depreciation of assets, and that in large part, directly and/or indirectly, falls over either workers' wages and/or part of the rest of the world depending on the implication

of the monetary emissions, the kind of restructuring and international economic relations in which the US economy has a central place.[19] Even so, it is appreciated through the hoarding due to the need of deleveraging and of affronting possible losses derived from toxic assets (Carchedi and Roberts 2013; Norfield 2012; M. Smith and Butovsky 2012; Roberts 2013).[20] Meaning, the separation between profit and investment existing since the crisis does not contradict a problem of insufficient capacity to generate surplus, given that corporate profits accounted by BEA "exclude depletion and capital losses and losses resulting from bad debts," that is, profit from changes in relative prices (BEA 2006, 11).

In this sense, the analysis from A. Freeman (2012) reveals that if we consider the financial assets in the denominator of the profit rate, its evolution would turn out to be negative. Also, and according to Harman (2008), part of the accounting profits registered in the period of the real estate speculation would be a product of certain accounting falsifications to improve the situation of companies in the stock exchange, avoid takeovers or increase the value of the stock options given to high-ranking corporate officers.[21]

Hence, although a detailed analysis of this problematic question and a quantitative approximation that reaches the true deterioration of profitability surpasses the objectives of this article (see Jones 2013), it is important to consider them in order to open new lines of research in the Marxist field, together with the elements mentioned in the second section. Anyway, there are reasons to justify the overvaluation of surplus, and so its monetary expression, profits, in the SNA.

Conclusion

In this article, we have explained that the characterization of the GR from the perspective of profitability requires not only to quantify its different expressions but also to consider a series of elements related to the geographical delimitation of the economy object of study (US), the historical transformations of the world capitalism, and the meaning of a determined accumulation process supported by the speculative boom, as well as the implication for the measurement of profitability. The crisis is a concrete phenomenon and, as such, it gathers multiple determinations and mediations that need to be highlighted and explained to establish the link with the profitability dynamic and, in general, with the fundamental laws of accumulation.

Both the mass and the rate of profit, quantifiable in different manners, have experienced an abrupt decrease from 2006Q3 until 2008Q4 of around 40%. If capital inflows and the adjustments for IVA and CCA are excluded, it would be even higher. The decrease of profitability translated into a stagnation of non-residential investment in 2008Q1, when it can be stated that the GR had already

started, and a decrease after that and until 2009Q4. Nevertheless, the collapse of total investment in 2006Q2 is explained by residential investment, which observed a slight decrease in the two previous trimesters.

It is our statement that it is the existence of masses of profit that do not find the possibility of valorization (an insufficient capacity to generate surplus), which explains that capitals have driven a speculative spiral around residential assets. This accumulation process has generated a weak investment dynamic when we insert it into a historical perspective, with low levels of employment creation and, in consequence, a regressive income distribution. However, labor productivity has grown faster than the capital-labor ratio, although there has been a change in the evolution of price indexes, which has brought as a result a fall in the productivity of capital. This decline, which in turn represents the maximum rate of profit, does break a trend that the US economy had managed to maintain between 1981 and 2003. This particularity relates to the fragmentation of the production process and the financial liberalization that has allowed for the outsourcing of certain lines of the production process, to finance itself at low costs and reduce both the cost of means of production and the labor force. Nonetheless, in 2003–07, these factors, although they have not disappeared, have not worked in the same way as before, given that they did not allow for a continued increase of the productivity of capital.

In turn, given both the speculative dynamic associated with asset securitization and the role of the US in the world economy, the national accounting practices underestimate the underlying profitability problem for different reasons: the methodology itself applied by the BEA in the context of indebtedness associated with the securitization process, the price rise of certain assets based on speculative demand, the government intervention to avoid corporate bankruptcies, certain non-transparent accounting practices applied by corporations, capital inflow into the US and how the burden of crisis could be transferred to other economies, and mainly, the transfer of income from households.

Therefore, we find it necessary to provide qualitative elements complementary to quantitative calculations to elaborate our characterization of the crisis as a phenomenon derived from the general laws of the capital accumulation process.

Appendix

Investment (*I*): private fixed investment by type (residential and non-residential; NIPA, Table 5.3.5. lines 1, 2, and 17), fixed investment as percentage shares of GDP (NIPA, 1.10-8), real private fixed investment (NIPA, 5.3.3-1, 2, and 20).

Labor (*L*): full-time equivalent employees in private industries (NIPA 6.5-3).

Profits (p): (1) for the rate of profit in graph 2, corporate profits are profits after tax (NIPA, 1.14-13), and surplus are from NIPA (1.14-3 and 4); (2) in graph 3, profits are from NIPA (6.16-1 and 7), deflated by the price indexes for Gross Value Added of business (13.4-2); (3) following the order in Table 2, domestic corporate business (1) (NIPA, 1.14-8, 9, 11, and 13), corporate profits (2) of non-financial corporate business (1.14-24, 27, and 29), financial, rest of the world and corporate profits (3) (6.16-1, 3, and 5). Profits of non-financial corporate business are deflated by the index from NIPA (1.14-17, and 43).

Stock of capital (K): net stock of private non-residential fixed assets at replacement cost, and at current (FAT, 4.1-13) and constant prices (4.2-13), and historical cost (4.3-13). For the rate of profit in year t $(p/K)_t$, we use the average of K in (t) and ($t-1$). A slight error is assumed when using Y/K as Y only takes the corporate sector.

Value added (Y): net value added of domestic corporate business (NIPA, 1.14-3).

Wages (W): compensation of employees (NIPA, 1.14-4). Wages and salaries per full-time equivalent employee (NIPA, 6.6-3) are deflated by the price indexes for personal consumption expenditures (NIPA, 1.1.4-2).

Price deflators (P): price indexes for net value added (NIPA, 1.9.4) of Net Domestic Product (line 1), business (line 2), and the stock of capital (FAT, 4.1, 4.2-13), used for GDP, Y, and K, respectively.

Notes

1. Despite the different theoretical perspectives, it is valid because it refers to the superficial manifestation of the phenomenon (see Tapia 2013). And as this author notes, the periodization of this organization for the US economy coincides with the one for the global capitalism.
2. In order to avoid an excessive list of references and controversies, see Mateo (2013).
3. The value of world exports, at current prices, fell at that moment by 1.11% and 20% per quarter during 2008Q4 and 2009Q1. In inter-annual terms, the decline is 11% in 2008Q3 and above 25% for the first three quarters of 2009 (WTO 2013). Of course, the incidence shows profound asymmetries, both geographical and sectoral, that do not invalidate the global nature of the crisis.
4. For the controversial issue on this term from the Marxian approach, see Mohun (2009).
5. However, it is justified to deflate wages with the general index PY if the perspective of capital is to be emphasized. In this sense, Shaikh (2016) advocates for using the same price index for both capital and profit (product).
6. And despite the higher value of liabilities held by non-residents, which generate the corresponding outflows of income, the US economy receives an amount ranging from 0.3% to 1% of GDP in revenue from the investment in foreign assets. In other words, profitability flowing to the US exceeds those going out despite the value of assets held by US residents being lower (BEA 2012), which complicates the analysis of the trend in profitability and the crisis (see M. Smith and Butovsky 2012).

7. Wages have grown very weakly during the expansion phase, with increased inequality and a decline in the share of wages in national income. In turn, the elasticity of wages to GDP was 0.75 between 1995 and 2007, but with a downward bias, so that the gap between the growth of GDP and wages has been widening (ILO 2008). This reconfiguration of the capital-labor ratio has been one of the key elements that have driven up the profitability of capital.
8. "*K*" stands for non-residential stock of fixed capital in net terms (see the Appendix), although the results are very similar with both gross and net terms in the series of "*K*." Note that it represents the lowest level of capital accumulation since 1950, even when compared with decadal periods that include recessions.
9. The last decade is also anomalous as it has been, paradoxically, the one that has experienced a higher growth of K/L, although originated from another unusual phenomenon, the fall in employment.
10. The 21%–24% for the whole economy. Herein after, if we do not specify otherwise, the data shown will be those corresponding to after-taxes rate of profit of corporate businesses, with capital stock at replacement cost.
11. Note that in the precedent expansion phase, the decline was somewhat lower (41%–43%) and lasted from 1997 to 2001. In the case of surplus, the decline would be 24%.
12. BEA (2014b, NIPA, Table 1.14, lines 33 and 38).
13. By saying four quarters before the beginning of the crisis in 2007Q4, it means that 2006Q3 is when the peak is reached and 2006Q4 is when we observe a decrease, as shown in Table 2.
14. And it should be noted that it is not the objective of the article, so this question is analyzed only as it is related to the above-mentioned proper aim: the study of the underlying profitability crisis and the way it is manifested in the US economy.
15. The rise in interest rates and its implications for the net profit of enterprise are a consequence of the falling profitability, as the value production needs a stable unit of account to develop this function.
16. In fact, in 2006 there was a boom of securitization in the segment called "subprime" that preceded the collapse of this activity.
17. In fact, the rate of profit shown in the National Accounts has been, curiously, the macroeconomic variable with the best performance in recent decades (A. Freeman 2012), and according to Kliman (2011, 138–39), it makes "the performance of US capitalism in recent decades appear better than it actually was."
18. It is also necessary to take into account "the increasing transfer of debt from the books of non-financial corporate businesses to 'special purpose vehicles'" (Moseley, n.d.).
19. In other words, the underlying problem of surplus value generation is temporarily hidden by changes in relative prices, the inflation of residential asset prices, in relation to the labor-time values (see Potts 2010).
20. Norfield (2012, 115) states that

    > this recovery in profits was due to the biggest speculative bubble in US history. Much of the recorded extra profit will either have been a result of the credit-fueled spending of the time, or will have reflected transient gains in financial market-values that companies reported as income.

21. Harman (2008) himself points out that the official US statistics incorporate into the accounts of "Flow of funds" certain adjustments that have meant an extraordinary increase in the net wealth of the country by adding "statistics discontinuities" and increasing property values. In 2005–06, they accounted for one-fifth of the increase in the net worth for the entire sector.

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AFRICA AND THE GLOBAL ECONOMIC AND FINANCIAL CRISIS

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Abstract: Capitalist economic and financial activities at the metropolitan centers reached the summit, overheated the world economy and exploded in 2007 in the form of economic meltdown. This unfortunate event had severe economic consequences on the world economy which, initially, African economies, being misconstrued as slightly exposed to global financial system, were thought to be the exceptions to the economic distress. The unfolding event, however, refuted this assumption owing to the interconnectedness of global economies. The coercive integration of African economies into the international capitalist economic system has meant that they are vulnerable to and more often than not buffeted by economic developments in the capitalist centers. This article examines the gross impact of one such development as the recent global economic recession on dependent economies of Africa, with a view that Africa's economic development and robustness, which could provide the necessary buffer against externally induced economic distress, are achievable only through self-diversification and industrialization.

Key words: Africa; economic recession; dependency; development; capitalism

Capitalism has indubitably proven that it is an economic system that creates a high-class conscious society, and also that it is fraught with internal contradictions and fundamental weaknesses. Periodic economic crises which are inextricably associated with the concept of market are among the inherent contradictions of the system that has proved incapable of transcending them (Rodney 1972, 13). Admittedly, global economy has severally been plunged into economic and financial crises since the emergence of capitalism as the predominant economic

ideology. The most recent of these crises erupted in 2007 and has continued to plague global economy since then, leaving it in ruin, shambles and great devastation. African economies could not have been the exception owing to their coercive integration into and orientation to the international capitalist system since the European expansionism of the 15th century. By this ill-fated development, African economies have lost their hitherto self-reliance, self-sustenance and resilience. Thus, they have become highly vulnerable to externally engineered economic distresses. This article makes a dissection of the recent global economic and financial crisis that is torturing the capitalist world. Its emphasis will be on the effects that the crisis has had on African economies and what is responsible for their liability to this monstrous trend. The article also considers the impact of the policy responses to the crisis by various financial institutions and African governments. The Marxist perspective on international economic relations is the framework that guides the analysis of this discourse.

Theoretical Perspective

The Marxist perspective on international economic relations is very instructive and incisive in elucidating the economic woes that have seized developing economies inclusive of Africans. Generally, Marxism is often used in reference to "those socio-political and economic ideas of Karl Marx which in time formed the basis for comprehensive social theory and political doctrine" (James and Olu 2012, 105). The Marxists argue that international economic relations are dictated by capitalist imperialism. To them, these economic relations are characterized by inequality, domination and exploitation of states that are comparatively weak to those industrialized powerful states of Western Europe, the United States and Japan. Capitalist imperialism is responsible for the integration of African and all third-world economies into the international capitalist market system through trade, colonial domination and capitalist investment with the sole objective of ensuring their structural dependence (Rodney 1972). In this way, capitalist imperialism has transformed economies of colonized Africa and other countries of the global South by integrating their financial and productive structures into an international system of capital accumulation. Capitalist imperialism is "an institutionalized system of control which systematically shapes the institutions and structures of dependent, dominated (African) countries and limits their freedom of action" (Cockcroft, Andre, and Dale 1972). This substantive viewpoint corroborates and validates the position that capitalist imperialism has restructured African economies. Internationalization of the world capital market has been accomplished through the World Bank among other agencies of international ruling class like the International Monetary Fund (IMF). Again, capitalist imperialism has integrated

the world capitalist economy into the structures of metropolitan multinational corporations (integrated conglomerate enterprises), most of which are based in the United States.

Being integrated and oriented towards the international capitalist market system, African economies, having lost self-reliance and self-sustenance, have become prone to the economic shocks and volatility of the capitalist system. The implications of this imperial conquest for African economies have been economic dependency, domination, and subordination of some by powerful capitalist states, which have also imposed endless financial ties of dependency upon the economic institutions in question.

Dependency theory can be viewed as a strand of Marxism. It explains underdevelopment as the consequence of capitalist imperialism. Dependency characterizes the international system as comprised of two sets of states, variously described as dominant/dependent, center/periphery or metropolitan/satellite (Ferraro 2008). States which are highly industrialized are dominant states, whereas dependent states are those of Africa, Latin America and Asia, with low per capita GNPs. These countries have been reduced by the complex capitalist system to mere exporters of primary commodities to the dominant states for foreign exchange earnings. Dependency theory maintains that since the integration of the economies of the vast area recognized today as the global south was made possible, economic activity in the richer countries has often led to serious economic problems in the poorer countries. Rooted in internationalization of capitalism, dependency is in point of fact the consequence of interactions or relations between the dominant and satellite states in international capitalism. A basic concept of dependency theory indicates that external forces exert a great measure of significant influence on economic activities within dependent states. Such external forces that determine the kind of economic activity within the satellite states of Africa include multinational corporations, international commodity markets, foreign assistance and communications.

There are unspoken restrictions that have been imposed on Africa's participation in the capitalist economy by the capitalist enforced rigid international division of labor. Africa plays marginal and peripheral roles such as supplying primary products and cheap labor in return for surplus capital, obsolescent technologies, and manufactured goods. These functions orient African economies towards the outside which constrains the capacities of these economies to maximize their economic potentials. There is no doubt that capitalist imperialism has reduced African economies to dependencies, such that they lurch in the morass of vicious exploitation and oppression. The bottom line is that African economies have been integrated into the international capitalist system to remain in the orbit of metropolitan economies. This accounts for their exposure to external economic distress represented by the recurrent global crisis of economic and financial nature.

Overview of the 2007 Global Economic and Financial Crisis

Economic and financial crisis has become a recurrent decimal, serving as the expression of inherent contradictions that imbue the capitalist system. An economic and financial crisis is a period of economic distress, economic downturn, economic meltdown, economic recession or economic depression. The Great Depression of the 1930s is among the foremost classical occurrences of this phenomenon. Several other cases like its outbreak in the 1970s often referred to as the Asian economic crisis are noteworthy. However, taking a historical trajectory of these events is not a primary concern of this discourse.

The global economy became deeply enmeshed in the bourgeoning crisis in the summer of 2007. The crisis first began when there was "an acute liquidity shortage among financial institutions as they experienced ever stiffer market conditions for rolling over their (typical short term) debt" (European Union Economic and Financial Affairs [EUEFA] 2009). This generated increasing concerns over the ability or financial capability of financial institutions to service their debts. The foremost incidence of insolvency involved Lehman Brothers, a major US investment bank, when it defaulted. Economic depression manifested in full swing with the prevalence of insolvency incidences. There were other major developments that characterized this period. These are identified as a general collapse of confidence in economic and financial activities; massive liquidation of the positions investors; descent of stock markets into a tailspin; credit restraint and sagging confidence smashed business investment and household for consumer durables and housing; the deleveraging across the economy that depressed demand; and painful adjustments that struck industrial structure (EUEFA 2009).

At the outset of the economic and financial crisis, it appeared that banks lost confidence in the credit worthiness of their counterparts with whom they had greatly invested in often very intricate, cloudy and exorbitant financial products. Thus, interbank market closed down and risk premiums on interbank loans soared. Banks had major difficulties in rolling over their short-term debt, which meant that they were confronted with a serious liquidity problem. In the twilight of 2008, bankruptcy hit some of the financial institutions in almost the entire world, causing growing severe panic in stock markets and evaporation of market valuations of financial institutions. At the peak of the economic and financial crisis, banks were forced to restrain credits, economic activity plummeted, loan books deteriorated, and banks cut credit further down. The downturn in asset markets snowballed rapidly across Africa. As trade credit went scarce and expensive, world trade plummeted, and industrial firms' sales dropped to historic low levels while inventories were piling up. As this situation persisted, it became more and more difficult for banks to raise capital via deposits and shares, resulting in their failures. The

failed banks and other financial institutions during the economic meltdown include among others Bear Stearns, Northern Rock, Landesbank Sachsen, Lehman Brothers, Fannie Mae and Freddie Mac, AIG, Washington Mutual, Wachovia, Fortis, the banks of Iceland, Bradford & Bingley, Dexia, ABN AMRO and Hypo Real Estate (EUEFA 2009). Some of the financial institutions at risk were compelled by the exigency of the deteriorating situation to sell their assets at "fire sale prices." The prices of assets fell, causing capital to reduce all the more. The meltdown kept deteriorating until it heightened the general structural crisis in the global economy.

The financial losses caused by this crisis were incurred in astronomical proportions. There was a steep increase in these losses during the first 18 months of the crisis as the IMF estimates have indicated. The IMF (2009a) estimated the losses experienced by the US banks amounted to about US$945 million in April 2008 and up to US$868 million in September 2008. By February 2009, the losses had reached a range between US$1 and US$2 billion. In April 2009, IMF Global Financial Stability Report (IMF 2009b) reported that loan on securities losses amounted to US$1,193 billion, while the write-downs losses had grown to US$316 billion and US$1,109 billion. African economies were no exceptions to these hugely suffocating losses which ruined even the most viable economic structures.

The cause of the 2007 economic and financial crisis remains a subject of the debate. While deflation of the subprime bubble from 2006 to 2007 is argued to be the proximate cause of the collapse of the financial sector in 2008, some have pointed out that the government regulations which caused the subprime bubble in the United States to boom and burst were responsible for the outbreak of the crisis. Yet others believe that capitalist "dissension" or "heterogeneity" as well as bankers' greed and mistakes prompted the crisis. Jeffrey (2009) contends that the meltdown was a direct consequence of

> The complex, constantly growing web of regulations designed to constrain and redirect modern capitalism. This complexity made investors, bankers, and perhaps regulators themselves ignorant of regulations previously promulgated across decades and in different "fields" of regulation. These regulations interacted with each other to foster the issuance and securitization of subprime mortgages; . . . it was impossible to predict the disastrous out-come of these interacting regulations. (129)

The government regulations that initiated this crisis were, among others, the Community Reinvestment Act (CRA). The CRA emphasized homeownership through subsidize mortgage lending by banks and government-sponsored enterprises such as the Federal National Mortgage Association (Fannie Mae) and the

Federal Home Loan Mortgage Corporation (Freddie Mac; Jeffrey 2009). The CRA encouraged private "securitization" of subprime loans and caused a larger housing bubble. Another government policy that is implicated in the financial crisis being considered was "The Basel rules," which were designed to be buffers against risk taking by commercial banks, stating among others that an adequately capitalized commercial bank must maintain 8% capital against its assets. The prospects and hysteria that the Basel rules aroused in investors which led to over-investment in toxic securities especially by banks immensely contributed to the distress that bedeviled the world economy afterwards. The other regulations which played a good part in the meltdown included "the loose money policies of the (U.S) central bank, which, in sparking the overall housing boom, also created a large but fragile subprime bubble; and the 'no-recourse' laws, entitling mortgagors to suffer little consequence if they defaulted" (Jeffrey 2009, 140). With overinvestment in toxic securities, interbank lending froze due to widespread doubt about banks' ability or capacity to repay. Consequently, the financial sector collapsed in 2008. The central bank of the United States, where the crisis originated, misconstrued the underlying cause of the collapse of the financial sector for liquidity crisis (bankruptcy), and consequently flooded the economy with liquidity. However, going by experts' verdict that it is inconceivable that mere morbid fear of mutual insolvency could actually be a causative factor in liquidity crisis, injecting more liquidity into the economy appeared an option without the requisite solution to the underlying problem. Thus, this attempt at boosting the economy with more liquidity rather aggravated the precarious situation, which ultimately led to the outbreak of the economic and financial crisis first in the United States, and then spreading wide beyond its original confinements, the United States, to the entire global economy.

The other school of thought neglects political factors and emphasizes capitalist dissension or heterogeneity as the major factor. The argument here is that capitalist self-interest, avarice and free-market ideology that generates unhealthy competitions of firms are inherent contradictions inextricably associated with capitalism. This heterogeneity often assumes the dimension in which different enterprises are structured by different theories, for example, those dealing with the best method of compensating executives and other employees, as well as those that treat how to make profit and how to avoid risk. This is inherent in the capitalist economy and has arguably accounted for periodic economic crises, due partly to the fact that it relates to the concept of market and as such is concerned with people's ability to pay rather than their need for commodities (Rodney 1972, 13). Owing to the incapacity of capitalism to transcend its contradictions and fundamental weaknesses, economic and financial crisis is bound to occur in consequence.

Africa's Vulnerability to the Global Economic and Financial Crisis

African and Asian societies "were developing independently until they were taken over directly or indirectly by the capitalist powers" (Rodney 1972, 16). This seizure has truncated and stunted the economic development of the entire continent of Africa. Once Africa was integrated into the international capitalist system, the nature and character of its traditional economic system that best suits its peculiarities was altered, and in its place the capitalist structure was erected to enhance capitalist domination and exploitation and plundering of the colossal resources endowed in the continent. The new structure ensured that African economies remain perpetually dependent on primary commodity exports and appear immune to diversification. Such primary commodities include inter alia oil, minerals, agricultural products and cheap labor. In return, African economies are recipient of surplus capital, outmoded technologies and manufactured goods, with harmful effects on domestic infant industries. Consequently, there is over reliance by African economies on foreign direct investment (FDI) and on foreign aid to stabilize budgets and provide basic services. Deriving support from migrant worker remittances and external borrowings, African economies are less industrialized but heavily depend on unscientific agriculture for productivity. Also, neocolonial relationships have continued to dominate Africa's trade ties. For instance, former French colonies have stronger trading and commercial connections with France than with China and other Western countries. It is quite paradoxical that African economies are agrarian, but the continent suffers from inadequate production of food for consumption, with a negative impact on the overall food security in most countries. As a result, most Africans are grappling with malnutrition. African economies' dependent nature signifies an enforced rigid international division of labor by the capitalist system in which they are mere suppliers of raw materials and cheap labor to the dominant metropolitan industries. The deep interactions and interconnectivities that African economies have maintained with metropolitan economies of the West make them vulnerable to unfortunate economic trends in the capitalist nations (Aduloju and Pratt 2014, 47–51).

Given this precarious nature, African economies have no capacity to refract disastrous economic events in the metropolitan economies, always faring worse in the wake of these events. The global economic and financial crisis in question has also presented substantial challenges for African countries. However, before its outbreak in 2007, African economies experienced a boom in their performances. Economic growth was strong and averaged 6.5% per year between 2002 and 2007 (Alexis, Martin, and Vivian 2010, 5). Real output growth was on average 5%, and inflation declined to single digits. The factors responsible for the short-term

growth were the hitherto general boom experienced in global commodity as well as a number of macroeconomic reforms that were executed. Again, there was a high external demand for African primary commodities that drove an investment surge in many countries, almost duplicating FDI stocks on the continent between 2003 and 2007. In addition, domestic demand grew, notably in telecommunications. Other factors for the strong growth were significant improvements in governance, which made the region more attractive for private capital flows, so that the net private capital flows to Africa increased from US$17.1 billion in 2002 to US$81 billion in 2007 (EUEFA 2009). These factors combined to boost the economic performance and management in Africa prior to the burst. Since the boost was externally orchestrated, its sustenance was equally dependent on external influences. The involvement of external factors in economic growth and development of African countries means that such growth is precarious and uncertain as it is bound to diminish when external financing and support cease. Dependence on external grace for growth by African economies should not be misconstrued for discernible manifestation of a complete absence of inherent ingenuity and innovation in Africa. Rather, it is effective execution of the game plan of capitalist imperialism.

Initially, analysts thought that African economies would experience little negative impact on the financial crisis since they considered that these economies were slightly exposed to the global financial system, more so as African banks possessed but a few of the "toxic assets" that played a significant role in sparking the crisis. They, however, seemed to be oblivious of the capitalist-induced nexus between African economic activities and those in the metropolitan cities. But their doubts were cleared off following the escalation of the financial crisis into a global economic recession during which African economies on the receiving end were severely buffeted by the resulting contraction in global trade. This decline considerably reduced the demand for African commodity exports. The crisis compelled most metropolitan nations to tighten financing conditions, thereby forcing a drop in FDI in Africa. In addition, there was a cut in foreign aid and other capital inflow. Revenues accruable to African economies from tourism and remittances from African workers abroad witnessed a drastic decline. Put succinctly, the conduits connected to Africa's "real" economy through which the global economic recession affected African economies were a decline in global trade, a drop in investment, dipping remittances from overseas workers and expurgated foreign aid. These channels are the variables that accounted for short-term growth that African economies had experienced before eruption of the economic crisis. Their withdrawal meant reversal of growth as has been indicated so far.

As world trade shrunk in response to the global economic and financial crisis, advanced economies of the United States, Europe and China, which accounted for

nearly 70% of African trade, were grossly affected. Little wonder that global demand for African primary commodities as well as their prices on the world market drastically decreased. African exporters of oil and other minerals were badly hit by this development, in that oil and other mineral fuels, ores, slag, ash, and precious stones have been the substance of the previous economic growth of many African countries.

Capital flows which have been instrumental in helping to fuel Africa's economic growth are FDI, portfolio investment flows, worker remittances, private charity and foreign aid. The IMF Sub-Saharan Africa Economic Outlook database, 2009, indicates that private capital inflows were the most important source of external finance for the region, growing from an estimated US$8.9 billion in 2000 to US$54.8 billion in 2007—or 6.5 times global foreign aid of US$8.5 billion. It states further that FDI peaked in 2008 at US$32.6 billion, and accounted for between 2.5% and 5% annual gross domestic product (GDP) between 2001 and 2007. However, at the peak of the recession in 2008, Africa witnessed the sharpest contraction in cross-border lending. It is estimated that over 50% cut was experienced, and portfolio investment flows were reversed from inflows of US$18.7% billion in 2006 to outflows of US$16.7 billion in 2008 (Alexis, Martin, and Vivian 2010, 12). These outflows have had a negative impact on Africa's economy since foreign investors fled the region's stock markets for safer and more fluid investment at home.

Remittances are monies sent home by foreign overseas workers. World Bank Migration and Remittances data records that remittances to Africa summed up to US$18.59 billion in 2007, nearly rivaling foreign aid flows. Within Africa, remittances are thought to account for 3.7% of GDP on average. Remittances in Lesotho, for example, were reported to be 29% of GDP in 2007 (IMF 2009b). While global remittance levels fell by 5–8% in 2009, from an estimated US$305 billion in 2008, remittance levels in Africa fell even more drastically by 4.4% and beyond according to this report. The reason for this is not far-fetched since population- receiving countries were forced by the downturn to make stringent immigration restrictions (Ratha and Mohapatra 2009). Falling remittances severely shook the region's economy.

The Organization for Economic Co-operation and Development (OECD) has asserted that Africa receives the highest total amount of overseas development assistance. It states further that Africa received the equivalent of nearly US$27.19 billion in bilateral overseas development assistance between 2006 and 2007. We have noted earlier that reliance on foreign aid inflows to support budget deficit is accountable to the vulnerability of African economies to global economic downturn. During the 2007 global recession, a handful of small donors including Italy, France and Iceland reduced bilateral foreign assistance to Africa, thereby aggravating the effects of the recession on African economies.

Africa and the Crisis: A Reflection on Its Impact

The 2007 global economic and financial crisis affected all categories of countries in Africa including fragile states, oil and non-oil exporting countries. Although there was general reduction of economic growth in Africa, it was more severe in Angola, Botswana, South Africa, Equatorial Guinea and the Sudan as these countries were expected to lose more than 4 percentage points in growth (Economic Intelligence Unit 2009). Besides, pursuant to the Economic Commission for Africa (ECA) report growth was expected to decline by between 2 and 3 percentage points in 2009 in Egypt, Kenya, Cape Verde, Nigeria, Ethiopia, Tunisia, Namibia, Mozambique, Sierra Leone, Lesotho, Ghana and the Democratic Republic of Congo.

Secondly, the crisis negatively impacted the stock markets, banks and exchange rates. It increased stock market volatility and wealth loss by about 67% in Egypt, Nigeria, Kenya, Mauritius, Zambia and Botswana between March 2008 and March 2009 (IMF 2009b). The financial sector and aggregate demand were also adversely affected as the ratio of non-performing loans to gross loans in Ghana increased from 7.9% to 8.7% in the third-quarter of 2008, while it increased from 2% to 3.5% in Lesotho (IMF 2009b). Although African banks had no significant exposure to the subprime mortgage market and asset-backed securities, they were nonetheless vulnerable to contagion effects of the crisis due to a high rate of foreign ownership of banks in several countries in the region (IMF 2009b). During the financial crisis, foreign-owned banks either reduced their support to local banks or sold their assets. This had deleterious consequences on the financial sector in Africa. Botswana, Cape Verde, Central African Republic, Chad, Ivory Coast, Equatorial Guinea, Lesotho and Zambia suffered particularly due to the high concentration of foreign-owned banks in them. Moreover, the financial crisis brought exchange markets of African countries under pressure on account of a significant depreciation in the exchange rate of their various local currencies. The crisis increased the risk premiums that African countries had to pay in international capital markets. This constituted a serious impediment to economic development in the region.

Likewise, the economic distress triggered a significant decline in the prices of key primary commodities that African countries exported to particularly industrialized countries of Europe and America. Crude oil was the most affected as its price declined by more than 50%, while prices of copper, coffee, cotton and sugar dropped by more than 20%, all in between 2008 and 2009. Africa's export volume diminished as a result of a drastic reduction in the demand for its exports occasioned by slowdown economic growth in industrialized nations. Report of the UNESC/ECA (2009) further indicates that Africa's exports growth in real terms

fell from 4.5% in 2007 to 3% in 2008, while the import growth shrunk from 14% in 2007 to 13% in 2008. The declines in commodity prices and foreign exchange earnings meant a reduction in revenues for African countries. This presented a critical challenge to African governments in trying to finance imported inputs necessary for boosting local productive activities.

Overseas workers' remittances play a major role in the development finance available to many African countries. However, the financial crisis reduced remittance inflows to sub-Saharan Africa by between US$1 billion and US$2 billion in 2009 (Ratha and Mohapatra 2009). Reduced remittances diminished the household consumption that they usually financed. Liberia, Lesotho, the Gambia and North African countries are a few examples of countries that were hit hard by this phenomenon.

Private capital flows to Africa especially FDI, which increased from US$53 billion in 2007 to $61.9 billion in 2008 and played a major role to boost economic growth, reduced during the crisis in 2009 (UNESC/ECA 2009). The crisis also dried up external finance derivable from the issuing of bonds in the international capital market. Several African countries now face difficulties in doing so. Thus, growth and development are constrained in the region.

Official Development Assistance (ODA) is another source of income that several African countries depend on to finance government programs. ODA experienced a sharp contraction or cut during the crisis in African states with extremely high ratios of ODA to gross national income. The drying up of development finance had several implications on the attainment of the Millennium Development Goals (MDGs) and other social development projects by African countries.

Implications of the Crisis for Africa

The impact of the economic and financial crisis has implications for Africa. First, decrease in economic growth and decline in exports volume have meant that African governments are confronted with fiscal deficits. They have to increase spending to expand social safety nets as revenues have declined owing to shrinkages in taxes and royalties on extraction of natural resource, in customs and tariffs on trade, in fees on tourist activity and in other consumption. Difficulties in raising finance, abating investor risk aversion and budgetary pressures have reportedly caused some major infrastructure projects, including government-funded projects and public–private partnerships, to come under strain (Alexis, Martin, and Vivian 2010).

The global economic and financial crisis reversed efforts by some African governments such as Nigeria, for instance, to alleviate endemic poverty. Following the contraction of per capita GDP in many African countries, the IMF estimated that in Africa, the crisis would add seven million people to the ranks of those

living below US$1.25 a day in 2009, and a further three million in 2010 (IMF 2009c). Drops in government revenues caused a reduction in budget allocation for public services and thus aggravated the poverty situation in Africa.

In addition, the crisis has dismal consequences on food security in Africa. The United Nations estimated that the proportion of undernourished people in Africa's population rose to 29% in 2008 and stalled progress in eradicating hunger on account of the global food crisis in 2008 (UNESC/ECA 2009). According to the Food and Agriculture Organization (FAO), food crisis occasioned by the financial crisis persisted in at least 20 African countries (Africa Progress Panel 2009). High food prices have both positive and negative impacts. They spurred enthusiasm in some crop producers but dealt a terrible blow to Africa's poor. Rising food prices could also cause disruptions in the socio-cultural life of people in many African countries. Again, as the crisis has increased the number of impoverished and unemployed persons in Africa, it might accumulate tensions and increase volatility of the political situation in Africa. This portends doom for the region.

"Someone Dial 911": Africa's Response to the Crisis

Both international and regional attempts were made at addressing the impact of the crisis on Africa. International and regional financial institutions were not left out of the overall efforts of both local and foreign national governments to attend to the crisis in Africa. First, developed countries of the world under the Group of 20 (G-20) took the initiative to address the global financial crisis. In a summit held in London in April 2009, the G-20 members made a unanimous decision to infuse US$1 trillion into the world economy in order to combat the effects of the global crisis (Alexis, Martin, and Vivian 2010). They also agreed to increase lending resources available to the IMF by US$250 billion and to use additional resources from agreed sales of IMF gold to provide US$6 billion in additional financing for poor countries. In the G-8 summit held in Italy, members expressed determination to "assist developing countries in coping with the impact of the crisis and commitment to fulfil the Gleneagles commitments on aid and improving aid effectiveness and strengthening global initiatives to achieve the MDGs and other anti-poverty goals" (Group of 8 2009). The US-led G-8 summit agreed to mobilize US$20 billion for agricultural development assistance in addition to previous commitments of emergency and humanitarian food aid. The United States vowed to increase its provision of agricultural development assistance to US$3.5 billion to African countries. It is, however, important to note that these were mere pledges with great uncertainty of being upheld or redeemed.

Second, international financial institutions made attempts at offsetting the impact of the crisis on Africa. The World Bank, African Development Bank

(AfDB) and the IMF all increased their lending to the African region in combating the economic and financial crisis. Most loan and assistance programs of these institutions during the crisis aimed at counteracting budget falls, increasing liquidity and providing financing for infrastructure and trade finance, all of which were considered to be crucial to Africa's eventual economic recovery.

The World Bank funded specific development projects around the world, especially in its poorest member countries such as those in Africa. The bank approved of a program called the Financial Crisis Response Fast-Track Facility. It was designed to enable the World Bank to front-load US$2 billion of the US$42 billion of assistance available under its International Development Association's 2007 financial replenishment (known as IDA-15; Group of 8 2009). Fifteen African countries were beneficiaries of this front-loading of IDA resources. The Democratic Republic of Congo received the bank's approval for a package totaling US$100 million in 2009 (Alexis, Martin, and Vivian 2010, 24). The World Bank's International Finance Corporation (IFC) deals with the private sector arm. It launched five new facilities aimed at supporting the private sector in affected emerging market and developing countries worldwide. The facilities were expected to finance its designated countries in what was to rise to a total of roughly US$31 billion. South Africa, Mauritius, the Democratic Republic of Congo, Comoros, Ghana, Kenya and Zambia were beneficiaries of the World Bank crisis-mitigating initiatives which scaled up its lending and policy advice that focused on poverty-reducing activities, safety nets, infrastructure support and budget support to compensate for the loss in private capital inflows (Alexis, Martin, and Vivian 2010). Also, the World Bank provided knowledge assistance to help countries prepare contingency plans for responding to the crisis. Again, it launched the Global Food Crisis Response Program (GFRP), which gave 10 African countries a total of US$83 million to fund seed and fertilizer purchases, safety net programs and budget support, while increasing lending in support of agriculture-related projects in Africa to US$1 billion (Alexis, Martin, and Vivian 2010).

The AfDB, in attempt to combat the crisis, declared four new crisis-response initiatives in March 2009, which included a $1.5 billion Emergency Liquidity Facility (ELF); a $1 billion Trade Finance Initiative (TFI); a framework for accelerated transfer of African Development Fund resources to eligible countries; and enhanced policy advisory support (AfDB 2009). The aim of the ELF was to provide financing to eligible African beneficiaries to support a broad range of obligations including underpinning a fiscal stimulus and support of public–private partnerships at risk (AfDB 2009). TFI on the other hand planned to launch a new line of credit of $500 million designed to enable commercial banks and development institutions in Africa to use Bank resources to support financing. Accelerated African Development Funds Transfers were concessional loans and grants

expected to provide budget support and infrastructure financing (AfDB 2009). Overall, AfDB initiated projects in which the primary objectives were addressing infrastructure, governance, macroeconomic policy, skills development and humanitarian relief, etc. To achieve these, AfDB doubled its lending to $11 billion from mid-2008, a large part of which went to Tunisia, Senegal and Djibouti, where investors had withdrawn (AfDB 2009). Again, Botswana received a $1.5 billion loan to address a budget deficit estimated at 13.5% of GDP while a $97.18 million grant was offered to the Democratic Republic of Congo for the funding of the country's Emergency Programme to Mitigate the Impact of the International Financial Crisis (Sanford and Weiss 2004).

In addition, the IMF tried to mitigate the impact of the economic and financial crisis. The IMF is a financial institution whose primary role is to provide loans to help countries that cannot meet their international payments and are unable to borrow money from other governments or raise capital on the financial markets at affordable terms (Alexis, Martin, and Vivian 2010). As a result, the IMF is often referred to as the international lender of the last resort. This institution increased its financial assistance to Africa by doubling the ceiling amount that countries may borrow (access limits) for low-income countries especially those in Africa who received a total of $2.7 billion of this sum in 2009 (IMF 2009a). Cote D'Ivoire and Zambia received $581 million and $342 million of these loans, respectively (IMF 2009a). Moreover, the IMF created concessional lending facilities such as the Poverty Reduction and Growth Facility (PRGF) and the Exogenous Shocks Facility (ESF) through which it provided financial assistance to African states. Again, the IMF made some reforms which created a $250 billion worth of IMF special drawing rights (SDRs) for African countries and their "equi-proportional" (all countries receive an amount relative to their IMF quota share) allocation to all member countries (Alexis, Martin, and Vivian 2010, 28).

Finally, African governments were not resting on their oars while the global economic and financial crisis plagued Africa. To address the crisis, a committee of 10 African Finance Ministers and Central and Regional Bank Governors (c-10) was constituted at an AfDB and ECA organized meeting in Tunisia in 2008 (AfDB 2010; Sudan 2009). Several meetings had been held by finance ministers and central bank governors of African countries, in which discussion and possible policy responses to the impact of the crisis were made. The communiqué issued at the end of the meeting held in Tunis in 2008 stressed the need for decisive actions to ease the effect of the crisis on African economies (UNESC/ECA Report 2009). African policy makers stressed and recommended some key policy responses. The other responses to the crisis that African governments provided included coordination and consensus building, provision of technical assistance and research support to African countries as well as provision of liquidity support to eligible

member countries. The Africa Progress Panel (2009) asserts that country-specific responses to the crisis involved "fiscal stimulus packages (e.g. Mauritius, South Africa); targeted assistance to certain sectors (e.g. Nigeria, Uganda); expansionary monetary policy (e.g. Botswana, Namibia, South Africa); and bond financing of public expenditures (e.g. Cape Verde, Kenya)" (see Sudan 2011, 11). Other responses from countries were reduction of interest rates at various percentages (e.g., Botswana, Egypt, Nigeria, Kenya, etc.); liquidity injections in the banking system; recapitalization of banks and regulatory changes; fiscal policy measures; trade policy measures; and improving domestic resource mobilization (ECA/COE Report 2009).

Limitations of Africa's Policy Response

Although the aforesaid policy responses to the economic and financial crisis may appear efficacious, they might however be constrained by factors militating against successful policy implementation in Africa. Some of the constraints are African governments' low capacity for funding policy interventions; ineffective economic governance in many countries; relative unavailability of foreign reserves; insufficient budgetary margins for enacting fiscal stimulus packages; and restrictions on incurring further external debt in countries that have benefited from international debt relief (Alexis, Martin, and Vivian 2010; Sudan 2011). Mismanagement, misappropriation, embezzlement and high-level corruption are other factors that could act as impediment to government effective responses to the crisis.

The Way Forward

Since the outbreak of the global economic and financial crisis, various institutions and countries have made enormous efforts to ensure mitigation of severe impacts of the crisis. African countries too have made commendable efforts in this direction. They have made policy measures affecting trade, fiscal stimulus, public expenditures, recapitalization of banks and liquidity injections to mitigate the crisis. Limited wherewithal at the disposal of most African countries could render these policies mere mental conceptions. On account of this, many analysts suggest that the international community should increase its provision of appropriate assistance to the region. Such analysts have pointed out some of the areas in which they argue that international action is needed.

First, analysts have observed that enhancing resource availability to boost demand and growth in Africa is of utmost significance to addressing the economic recession. This suggests Africa's further integration in the coordinated effort to

deepen global aggregate demand. According to this view, such finance to boost demand and growth in Africa could be generated by rich countries increasing their effort to meet the existing commitments on aid and debt reduction. Rich countries will also accelerate disbursements to improve poorer nations' access to the existing finance facilities. Analysts of this school of thought urge the IMF to put in place a new facility with relaxed conditions to support African economies. Besides, they suggest early capital increase for the AfDB for scaling up its interventions to support African development, arguing further for more sales of IMF gold reserves to release additional resources to help developing countries as well as issuance of new special drawing rights in order to deal with the crisis (ECA/COE Report 2009).

Second, it has been suggested that the international financial system, which has come under severe criticism by Africa and developing countries, should be reformed. According to this view, there are key areas of the Bretton Woods Institutions that need reform and change. First, it is argued that there should be increasing policy space for Africa and developing countries which could be achieved through relaxing of the imposition and use of policy conditionality in aid delivery as such limit policy choices available to African governments. Consequently, many African countries are advocating a redesign of the World Bank Country Policy and Institutional Arrangement (CPIA). Second, the debt sustainability framework (DSF) of the World Bank should be restructured since the current framework is seen to be fraught with fundamental shortcomings such as methodological limitations and subjective judgments about what constitutes good policy and good institutional arrangements (UNESC/ECA 2009).

Ultimately, analysts contend that Africa needs to be given the opportunity of adequate representation and the participation in international platforms or forums such as the World Bank, the IMF, and the Financial Stability Forum where decisions that affect African economies are taken. Trade which is an important source of development finance in Africa should also be promoted and conducted on equal terms in contrast to the trade protectionism policies of especially the advanced countries of the capitalist Western world.

The issue with the foregoing strategies for Africa's recovery is the undue emphasis placed on external interventions for solutions to the economic distress that has engulfed African economies. External factors could sabotage and sink African economies deeper into the quagmire and compound African economic woes for which the same external forces should take responsibility. Reliance on peripheral grace of the outside world as a solution to Africa's economic distress which at best is palliative could even end up taking Africa round the vicious cycle.

The key solution to Africa's economic distress is diversification and industrialization. This is highly significant due to its potentials of boosting economic

growth and performance to historic high levels. Again, diversification and industrialization will empower African economies and help them regain self-sustenance, which in turn will equip African economies with the requisite shock absorbers and resilience. The various African governments have a crucial role to play in this process of reducing overdependence on external grace and assistance. Their main duty will be to provide the environment conducive for honing and acquiring technical skills as well as empowering infant industries for growth and development. External economic relations would be targeted at ensuring transfer of technology and attainment of scientific agriculture. These are indispensable antidotes to African economic ailment.

Conclusion

International economic relations between the advanced capitalist powers and Africa are conducted on capitalist terms which have remained unequal and not mutually beneficial. Africa is made to shoulder the burden and brunt of this inequity. This is due to the fact that Africa is not only subjected to the yoke of cruel domination and exploitation, but it is also made to remain in the orbit of capitalist imperial powers. Africa's integration into the international capitalist system was at this essence. As a result, the continent becomes highly vulnerable to frequent economic and financial crisis often caused by inherent contradictions that characterize the capitalist system. The recent global economic and financial crisis is a vindication of the point being made. It is no paradox that even in such unfortunate economic situations that serve the exploiter and the exploited no good; the exploiter still finds opportunities to dole out loans, foreign aid and assistance to the exploited which possesses no shock absorbers. All of these appear as mere ploys of the metropolitan capitalist powers to perpetuate their domination and exploitation of the dependencies or satellites. Africa, and Third World countries, by these developments have been rather deeply sunk into the quagmire, dilemma and vicious cycle of capitalist subjugation.

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ETHIOPIA–CHINA ECONOMIC RELATIONS

A Classic Win–Win Situation?

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Abstract: A significant body of literature has held that Chinese interest in Africa is driven by a hunger for resources. This makes Ethiopia an important case study. Ethiopia experienced high rates of economic growth from 2003 onwards, thanks to rapid agricultural development. This period was also characterized by an intensification of Ethiopia–China relations. Bilateral trade between the two countries expanded rapidly, and China is currently the country's top trading partner. Ethiopia gained from China's zero-tariff policy on agricultural imports, and there was a dramatic growth in its sesame exports to China. China is also a major source of manufactured goods and machinery for Ethiopia. Despite being an agricultural exporter, it has attracted significant volumes of Chinese official financial flows and foreign direct investment (FDI). Chinese official finance is directed to building infrastructure, whereas Chinese FDI is directed to the manufacturing sector. This article concludes that the overall impact of China on Ethiopia is beneficial.

Key words: China–Ethiopia relations; Ethiopia–China trade and investment linkages; impact of China on Ethiopia

Introduction

Ethiopia is an important case study because it is a significant departure from the body of literature on China–Africa relations which has held that Chinese interest in Africa is primarily driven by hunger for resources. Agriculture is the dominant economic activity in Ethiopia. Nearly 85% of the population is dependent on agriculture, and agriculture accounts for about 41% of Ethiopia's gross domestic product (GDP) and 90% of its export earnings. The Ethiopian government has recognized that rapid agricultural growth is a necessity for poverty eradication and

high rates of economic growth. Therefore, agriculture is the cornerstone of the "Growth and Transformation Plan," and the country has embraced the strategy of Agricultural Development Led Industrialization.

Ethiopia experienced high rates of economic growth from 2003 onwards and has outperformed most other African countries. Its GDP grew at a rate of 10.9% from 2003 to 2013 as compared with 4% from 1993 to 2003.[1] Ethiopia's growth is largely led by rapid growth in agriculture, and there has been a remarkable growth in agricultural production from 2000 onwards. The compound annual growth rate of production of major food crops, viz. maize, sorghum, wheat and barley from 2000 to 2013 was 7.2%, 9.7%, 8.9% and 6.9%, respectively.[2] Output growth in the case of Ethiopia's two major export crops, coffee and sesame, was even more pronounced.[3] After a period of decline in production, coffee production picked up in 2003. Production of sesame seeds grew very rapidly at a compound annual growth rate of 21% from 2000 onwards mainly due to a growth in Chinese demand. Increase in the total agricultural production largely came from an increase in acreage and higher yields due to greater public investment in agriculture.

The period of high growth rates in Ethiopia was also marked by an intensification of Ethiopia–China economic relations. Bilateral trade between the two countries expanded rapidly, and China is currently the country's top export and import partner. Ethiopia's imports from China increased rapidly from 2002 onwards, and China now accounts for over one-fifth of Ethiopia's total imports. Growth of Ethiopia's exports to China is a more recent phenomenon. Prior to 2005, China was a relatively unimportant export destination for Ethiopia, with a share of just 2.4% in 2004 which rose to 11.1% in 2012. Despite being an agricultural exporter, Ethiopia has attracted significant volumes of Chinese official financial flows and foreign direct investment (FDI). Chinese official financial flows are largely directed to building critical infrastructure in Ethiopia, whereas Chinese FDI is directed to the manufacturing sector.

This article attempts to study the nature of China's economic activities in Ethiopia and its impact on Ethiopia's development process. The next section gives a brief summary of the existing literature on Ethiopia–China relations. Following this, the article discusses Ethiopia's trade with China, and Chinese development assistance and FDI in Ethiopia. Based on this analysis, the penultimate section discusses the impact of China on Ethiopia and the last section concludes. The data sources for this study are as follows. Trade data have been obtained from the UN Comtrade Database using the World Bank's WITS Software up to five-digit level of the Standard International Trade Classification (Revision 3). Bilateral FDI from Organisation for Economic Co-operation and Development (OECD) countries to Ethiopia has been obtained from the OECD database. The data on Chinese official

finance and FDI in Ethiopia are from Aid Data (China.aiddata.org) and the CEIC database, respectively.

Literature Review

There are a few studies that have explored the bilateral relationship between China and Ethiopia. The earliest such study was undertaken by Chris Burke, Lucy Corkin and Nastasya Tay from the Centre for Chinese Studies in 2007. Burke, Corkin, and Tay (2007) explored China's political, investment, trade and aid profile in Ethiopia. According to this study, although Ethiopia is landlocked, it is strategically located in the Horn of Africa and is a lucrative market for Chinese products. Ethiopian exports to China have grown rapidly but it suffers a huge and increasing trade deficit with China. Chinese investments, particularly in the telecommunications and energy sectors, have also assumed significant proportions.

Geda (2008) found that Ethiopia–China relations have grown strongly in the areas of road construction, supply of manufactured goods from China, telecommunication and installation of electric power stations by Chinese companies. Nevertheless, Chinese official aid flows to Ethiopia are minimal as compared with that from advanced countries. According to him, Chinese firms providing finance for Ethiopian telecommunication may be regarded as some sort of aid because western firms are generally unwilling to provide vendor financing for such projects. However, apart from the 3-year grace period, the financing has been offered at market rates and is conditional on Chinese firms taking up the job. He attributes the success of Chinese firms to the political ties between the two governments, low initial bidding price and the self-financing options provided by the Chinese firms. Given Ethiopia's strategic importance, Chinese investment and aid directed to Ethiopia are also aimed at providing a model for other African countries. The main beneficiaries are local consumers and commercial traders who bring manufactured consumer goods from China for sale in Ethiopia as well as entrepreneurs engaged in establishing small-scale factories and service centers by buying machinery from China. The possible losers are those threatened by import competition from China, such as small-scale firms engaged in clothing and footwear sectors, and their employees and traditional suppliers and contractors in the road, electric power and telecommunication sectors of the economy, which are invariably firms from industrialized countries.

Thakur (2009) regards the study of Ethiopia–China relations as an anomaly in the existing literature which has focused on China's "no strings policy" in resource-rich African countries. She argues that China's contribution to Ethiopia's economic development is quite significant in infrastructure, information and communication technology and hydroelectricity projects. According to her, the Chinese

government has allocated grants to support the construction of low-cost housing, rural school construction, the rehabilitation of roads and bridges, and vocational, agricultural and management training. However, most of this is tied to using Chinese companies and the import of Chinese materials. Ethiopia has also gained from China's zero-tariff policy, and its exports to China have grown tremendously after 2005 but its trade balance with China is lopsided in favor of China.

According to Geda and Meskel (2010), Chinese investment in Ethiopia rose sharply after 2000 but Chinese FDI only represented 3.5% of the total FDI stock in Ethiopia in 2009. Chinese firms are concentrated in manufacturing, construction and real-estate sectors. Their survey of 30 Chinese firms in Ethiopia shows that the main motive for Chinese investment, particularly in the manufacturing sector, is market seeking. The authors describe China's role in sectors such as telecommunications, transport and electricity as "quasi investment" because such large-scale projects would be impossible without Chinese finance. The magnitude of Chinese investment in these sectors is gigantic. For instance, Chinese companies are involved in nearly all power-generation projects of Ethiopia, and the total values of power generation, power transmission and the government's universal access program are estimated to be US$1.7 billion, US$350 million and US$23 million, respectively. Similarly, Chinese firms also dominate Ethiopia's road construction and telecommunication sectors.

Gamora (2009) analyzes the political and economic relationship between China and Ethiopia after 1991. China has funded a number of infrastructure projects in Ethiopia and has extended the zero-tariff export items to about 444 commodities. Moreover, China supported Ethiopia in a number of international issues. From China's point of view, Ethiopia's main attraction lies in its strategic importance and market potential even though it lacks natural resources. Ethiopia also has a huge population which is a lucrative market for Chinese products. However, the main problem in the Ethiopia–China relation lies in the large and growing imbalance in trade. Competition from Chinese imports particularly in the plastic and textile manufacturing sectors has severely affected domestic production. Also, many Chinese infrastructure projects are funded through "tied" Chinese aid.

According to Adem (2012, 147), the motive for China's increased activities in Ethiopia lies in its diplomatic usefulness. Chinese leaders regarded Ethiopian premier Zenawi as an advocate of China as a partner for Africa and Ethiopia also enjoys ample diplomatic clout within Africa. Hackenesch (2011, 2013) discusses the competitive pressure that China exerts on the European development policy regime. Ethiopia is one of the most important countries in Chinese as well as European cooperation with Africa, due to the level of needs, the perceived development orientation of the government and good track record in implementing assistance. In fact, he goes on to describe Ethiopia as a "donor darling." Yet

Chinese and European policies towards Ethiopia differ greatly. The European Union (EU) mainly engages Ethiopia as an aid recipient, whereas China has developed a comprehensive partnership with Ethiopia. China's largest impact on development opportunities in Africa does not stem from pure aid but from other official flows, trade and investments. China has emerged as an alternative partner to the Ethiopian government, which has increased the leverage of the Ethiopian government vis-à-vis European and other traditional donors.

Jalata's (2014) research on development assistance from China and India to Ethiopia is valuable. As opposed to the traditional donors which focused on education, healthcare, poverty reduction and budgetary support, Chinese aid is typically combined with trade, investment and market access. China's development assistance is based on requests from the recipient country and therefore, is more in line with Ethiopia's development priorities. Three sectors, namely energy generation and supply, transport and storage, and industry, account for the bulk of China's aid to Ethiopia. China's Duty-Free Tariff Preference (DFTP) scheme for the least developed countries has facilitated Ethiopia–China trade but the balance of trade continues to be tilted in favor of China. He also observes that Chinese investments have created employment opportunities for Ethiopians. Nevertheless, Chinese aid is not devoid of challenges for Ethiopia. The biggest risk lies in the fact that Chinese development assistance is heavily tied to using Chinese companies and procurement of materials from China, which adversely affects spillover effects on local economies, job opportunities, and knowledge and skill transfer. Moreover, some Chinese projects are financed through tied aid which might create over-dependency, because once Chinese equipment becomes operational it will be difficult if not impossible to use spare parts from other sources. Chinese companies are also criticized for not employing adequate Ethiopian professionals in key technical and managerial posts, which hampers technology and skill transfer. There are also concerns that Chinese commercial loans may force Ethiopia back to a cycle of indebtedness.

Ethiopia's Trade Relations

Ethiopia's Exports

After a period of stagnation till 2002, Ethiopia's exports grew rapidly. Ethiopia is mainly an agricultural exporter. Coffee has traditionally been its main export commodity, but its importance has reduced over the years. In 2000, coffee accounted for about 53% of Ethiopia's total exports but by 2012, its share declined to 31%. This decline was not due to a slowdown in coffee exports because coffee exports grew rapidly at a compound annual growth rate of 11% during this period. Instead, there was a shift in Ethiopia's export pattern towards high-value agricultural

exports such as sesame seeds, cut flowers, dried chickpeas, dried beans, vegetables (fresh and chilled) and bovine animals (other than pure bred). Sesame seed can be regarded as the most interesting commodity for two reasons. Firstly, sesame exports grew very rapidly from 2004 onwards, and it now accounts for about 15.1% of Ethiopia's total exports. Secondly, it is Ethiopia's chief export commodity to its largest export destination, China.

The geographical composition of Ethiopia's exports also underwent significant changes. Ethiopian exports to China from 2000 to 2012 grew at a very rapid rate of 63% per annum. There was a six-fold growth in Ethiopia's exports to China in 2005, and by 2012 China became the country's top export destination. The shares of its erstwhile top export markets Germany, Japan, Djibouti and Italy declined significantly. However, apart from Japan, the growth rate of exports was buoyant for all countries.

The spectacular growth of Ethiopia's exports to China in the last decade can be almost exclusively explained by sesame seeds. Ethiopia's export of sesame seeds to China was minimal until 2005, when there was a 48-fold increase in sesame exports to China (Figure 1). Barring the years 2006 and 2007, sesame seed exports grew steadily and reached a high of US$272.6 million in 2012 and accounted for 85% of Ethiopia's exports to China. This rapid growth of Ethiopian sesame seed exports can largely be traced to developments within China. China was the world's largest producer of sesame seeds, but from 2002 onwards its domestic production declined rapidly from a high of 895.2 million tonnes to 623 million tonnes in 2012. Due to the domestic shortage of sesame seeds, China's imports increased rapidly after 2002 (Figure 2). China's sesame seed imports from Ethiopia grew rapidly from 2005 onwards, the year China offered zero-tariff entry to agricultural exports from Africa's least developed countries. Ethiopia is now China's largest external source of sesame seeds, accounting for 51.2% of Chinese imports of this good.

Leather is the second most important export commodity to China after sesame. Traditionally, Italy was the largest market for Ethiopian leather. But from 2004 onwards, China's importance has grown. Ethiopia's leather exports to China grew at a compound annual average growth rate of 41% from US$1.2 million in 2004 to US$19 million in 2012. Leather accounted for 5.9% of Ethiopian exports to China in 2012. China's share in Ethiopia's total leather exports also grew remarkably from a mere 0.7% in 2000 to 22.2% in 2012 which was slightly greater than Italy's share at 20.3%.

Although Ethiopia has a small industrial base, it has significant potential in the leather industries sector because it is richly endowed in terms of livestock resources. Furthermore, the Ethiopian government has been actively involved in the promotion of industrialization in the leather value chain. In 2004, the government suspended the ban on foreign investment in tanneries which led to

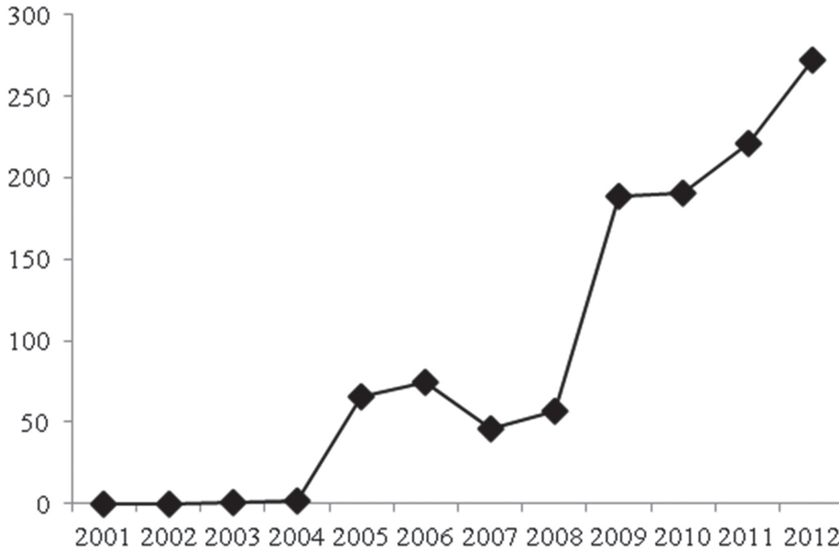

Figure 1 Ethiopia's Exports of Sesame Seeds to China (in US$ Million) from 2001 to 2012
Source: Author's own from UN Comtrade Database.

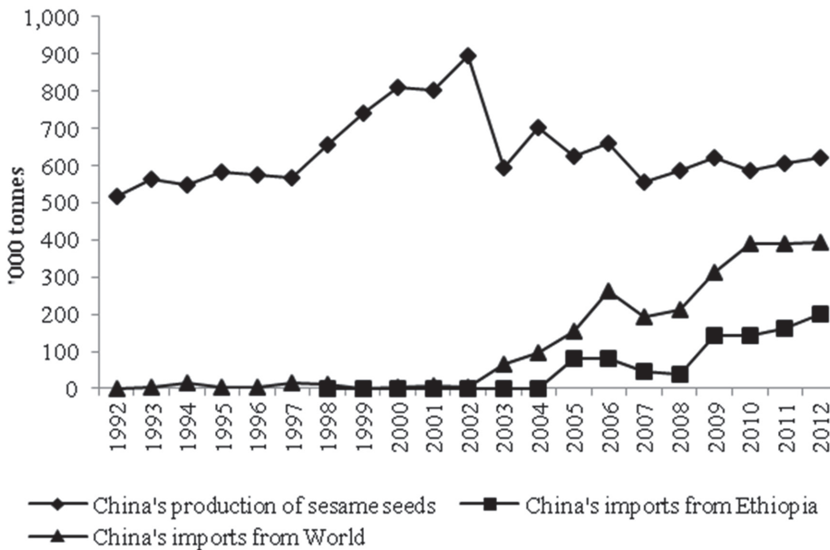

Figure 2 China's Production and Imports of Sesame Seeds from 1992 to 2012 (in '000 Tonnes)
Source: Author's own from UN Comtrade Database.

a significant increase in foreign investment. About 55 projects were granted investment licenses in the country between the years 2003 and 2012 with a total capital of US$109.1 million. The majority of these investments came from China and India (UNIDO 2012). China leads all other countries with 12 purely Chinese-owned ventures and 2 Chinese joint ventures with third countries (ibid.).

Foreign investment led to greater technological sophistication of Ethiopia's leather exports. Exports of prepared sheep or lamb leather increased rapidly from US$1.2 million in 2004 to US$60 million in 2012 (Figure 3). Similarly, exports of prepared goat or kid leather increased from US$1.1 million in 2004 to US$22.7 million in 2012. On the other hand, there was a steep decline in exports of tanned leather. In 2008, the government levied a 150% export tax on exports of raw and semi-processed hides and skins to encourage domestic processing and to enhance supply to local industry. This led to a dramatic decline in Ethiopia's exports of raw hides, skins and furskins in 2009. In 2011, the government also levied a 150% tax on the export of crusted leather to encourage further value addition.

Leather exports to China have also undergone technological sophistication in recent years. Prior to 2008, exports of tanned leather to China exceeded prepared leather exports. However, exports of prepared sheep/lamb leather grew tremendously after the export tax on raw hides was imposed in 2008. In a short span of 4 years, there was a 10-fold increase in prepared sheep/lamb exports from US$1.9 million in 2008 to a high of US$19 million in 2012.

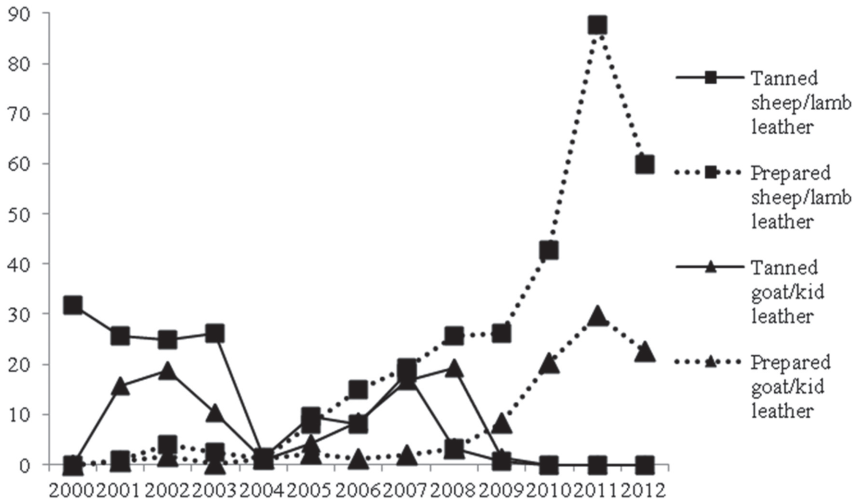

Figure 3 Ethiopia's Exports of Leather Manufactures (in US$ Million) from 2000 to 2012

Source: Author's own from UN Comtrade Database.

Ethiopia's Imports

Ethiopia's imports from China grew rapidly from 2002 onwards and by 2012, Ethiopia's imports from China stood at US$2,572.4 million representing about 21.6% of its total imports, as compared with 7.7% in 2000. The share of developed country partners—namely Japan, Germany, the United States and Italy—declined but Germany was the only country that suffered an absolute decline in its exports.

China has emerged as the principal source for manufactured goods, miscellaneous manufactured goods, and machinery and transport equipment for Ethiopia (Table 1). Manufactured goods and machinery and transport equipment together account for over 90% of Ethiopian imports from China. Capital goods such as goods transport vehicles, building structures and parts, mechanical shovels, telecommunications parts and accessories are the leading import items from China.

Impact of Manufactured Goods Imports from China

Chinese manufactured goods have literally flooded the Ethiopian market in the last decade. China accounted for over half of Ethiopia's imports of some commodities such as leather manufactures, textile yarn and fabrics, and cork and wood manufactures by 2012. In 2000, India was the largest exporter of manufactured goods to Ethiopia with a share of 19.1% in Ethiopia's total manufactured goods imports, followed by China at 13.1%. However, China overtook India in 2003 and by 2012, it accounted for over 31% of Ethiopia's manufactured imports, whereas India's share declined to 14.9%. Italy's share also declined, but manufactured exports from India and Italy increased in absolute terms. Japan and Germany were relatively small players to begin with, and their share declined further.

Despite the fact that China has replaced India as Ethiopia's largest import source for manufactured goods, we find that India's market share increased in rubber manufactures, n.e.s., cork and wood manufactures, paper and paperboard articles, and metal manufactures. Although India lost market share in textile yarn and fabric articles, iron and steel, and non-metal mineral manufactures, in absolute terms its exports grew rapidly. However, in the case of non-ferrous metals, there was an absolute decline in India's exports after 2009. Chinese goods displaced Japan in only cork and wood manufactures which had a very small share in total Japanese exports to Ethiopia. Again, in the case of Germany the two commodities whose exports declined (rubber manufactures, and cork and wood manufactures) had a very small share in Germany's total exports to Ethiopia. The adverse impact of China was most pronounced in the case of Italy because there was an absolute

Table 1 Share of China and Other Import Origins in Ethiopia's Imports (2000–2012)

	Manufactured imports (%)			*Miscellaneous manufactured imports (%)*			*Machinery and transport equipment (%)*		
	2000	*2006*	*2012*	*2000*	*2006*	*2012*	*2000*	*2006*	*2012*
China	13.1	23.8	31.5	27.4	43.9	52.1	6.3	13.2	35.7
India	19.5	15.5	14.9	3.1	5.2	6.9	1.5	3.5	8.8
Italy	7	6	4.3	6.7	3.1	3.1	18.8	14	8.4
Japan	4.1	2.8	2.3	1.8	1	1	21.7	10.2	11.4
Germany	2.5	2.2	1.2	10.8	2.7	2.7	12.2	6.3	4.9

Source: Author's own from UN Comtrade Database.

decline in Italy's exports of five commodities, viz. rubber manufactures, cork and wood manufactures, paper and paperboard articles, iron and steel, and non-ferrous metals. The adverse impact of Chinese manufactured goods imports on domestic production is likely to be minimal because Ethiopia has a very poor industrial base other than leather products.

Impact of Miscellaneous Manufactured Goods Imports from China

In the case of miscellaneous manufactured goods, China's share in Ethiopia's total miscellaneous manufactured imports grew from a high of 27.4% in 2000 to 52.1% in 2012. China's spectacular growth was accompanied by an increase in India's share from 3.1% in 2000 to 6.9% in 2012. Italy's share declined from 6.7% in 2000 to 3.1% in 2012. Germany's share declined considerably due to a decline in its exports in the first period. There was a marginal decline for Japan.

By 2012, China accounted for more than half of Ethiopia's imports of furniture and furnishings, over three-fourths of Ethiopian imports of travel goods and handbags and apparel and clothing accessories, and nearly 90% of Ethiopia's footwear imports. Gebre-Egziabher (2007) asserts that domestic footwear manufacturers, particularly micro-enterprises, were adversely affected by Chinese imports because Chinese shoes are targeted at the lower end of the market. Nearly one-third of the footwear manufacturers responded to Chinese competition by downsizing their activity, and there was a drastic decline in the mean number of employees per establishment. Some small and medium firms were able to withstand Chinese competition by improving design, quality, and specializing in men's shoes because of the difficulty in competing in the women's shoes market. However, the micro-enterprises took the "low road" to survival by reducing profit margins, lowering prices by lowering quality and informalizing production.

A deeper analysis up to the five-digit level throws up interesting facts about the footwear sector. Firstly, the bulk of the footwear imports from China are rubber or plastic footwear and sports footwear with outer soles and uppers of rubber or plastic, an area in which Ethiopia does not have any advantage (Figure 4). Footwear with some leather in it constituted only 1.4% of the total Chinese footwear exports to Ethiopia. As a result, domestic enterprises are less likely to have faced direct competition from Chinese imports because China is not exporting the kind of shoes in which Ethiopia has an advantage. Furthermore, given that Chinese shoes are targeted at the poorer strata of the society, there are welfare-enhancing effects of cheap Chinese footwear imports.

Impact of Machinery and Transport Equipment Imports from China

There was a massive growth in machinery and transport equipment imports from China, particularly after 2006, and China became Ethiopia's prime source of machinery and transport equipment displacing Japan, Italy and Germany. By 2012, China accounted for over 35% of Ethiopia's total machinery and transport equipment imports, whereas the share of Japan, Italy and Germany had declined significantly. In the case of Italy and Germany, there was a massive deceleration in the rate of growth of machinery imports from 2006 to 2012. However, Ethiopia's imports of Japanese machinery and transport equipment grew rapidly in absolute terms during this period. Machinery imports from India also grew rapidly during this period, and India's share increased from a mere 1.5% in 2000 to 8.8% in 2012.

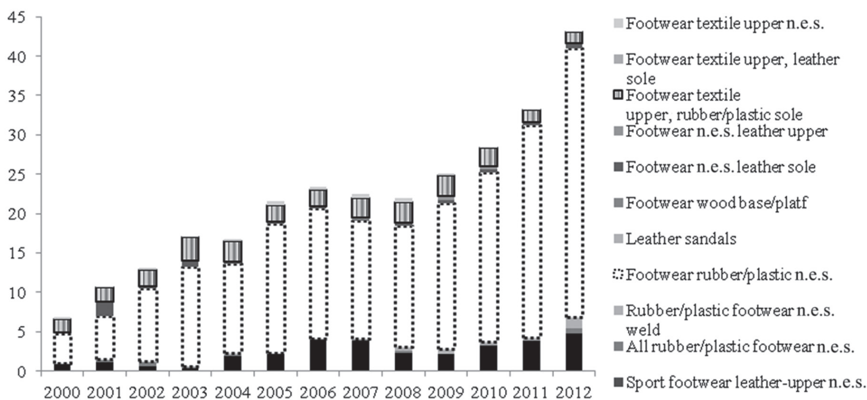

Figure 4 Ethiopia's Footwear Imports from China at the Five-Digit Level (in US$ Million)
Source: Author's own from UN Comtrade Database.

China became the market leader in all commodity categories except road vehicles and other transport equipment in which Japan continues to lead. However, there was a surge in Ethiopia's imports of road vehicles from China after 2008, and within a span of only 4 years there was a four-fold increase in road vehicle imports from China, and by 2012 it accounted for about 31.5% of Ethiopia's road vehicle imports. There was a decline in road vehicle imports from Italy and Germany from 2006 to 2012. Interestingly, imports from India also grew both in absolute terms and in terms of shares for all commodities, which shows that machinery imports from China have not crowded out machinery imports from India. Although Japan's share declined in all the commodities, its export growth was buoyant in all commodities.

The rapid growth of Chinese machinery and transport equipment imports in Ethiopia after 2005 is mainly due to the growth of Chinese development assistance in Ethiopia which is heavily tied to the use of Chinese inputs. The value of Chinese outward contracted projects increased dramatically from US$182.2 million in 2005 to US$2,291.7 million in 2012 at a compound annual growth rate of 44%.[4] Import of capital goods from China is a win–win situation for Ethiopia. Firstly, capital goods imports exert a positive effect through technological catch-up and increased productivity. Secondly, given Ethiopia's poor industrial base, Chinese capital goods do not have any adverse effect on domestic production but displace imports from developed countries. Thirdly, Chinese capital goods are relatively cheap and are usually financed through Chinese development assistance.

Chinese Development Assistance in Ethiopia

Foreign aid had traditionally played an important role in Ethiopia's economy. Official aid flows to Ethiopia from bilateral and multilateral sources increased continuously from 2000 onwards after a period of decline in the 1990s. The literature suggests that Ethiopia's attractiveness as an aid recipient lies in a number of factors. Firstly, it is strategically located in the Horn of Africa between Sudan and Somalia, two countries that are regarded as threats to the West (Alemu and Scoones 2013, 2). Secondly, it exerts a significant influence in African politics. In terms of need, Ethiopia has a large population living in abject poverty. And lastly, the Ethiopian government's record in aid implementation is believed to be more satisfactory than other African countries (Alemu and Scoones 2013, 2).

Although China–Ethiopia relations date back to the 1970s, China was a marginal player in Ethiopia's aid landscape until only recently. In fact, Chinese development assistance was inconsequential even in the early 2000s. Most of the studies reviewed in this article recognized the growing

importance of China's aid to Ethiopia. Yet they asserted that Chinese aid is a rather small component of Ethiopia's total aid receipts according to the conventional definition of aid.

Western aid flows to Ethiopia generally take the form of official development assistance (grants, subsidized loans, aid in kind, debt relief, etc.). But this traditional definition of aid would grossly underestimate the importance of Chinese official financial flows to Ethiopia because Chinese development assistance extends beyond the conventional grants, aid in kind and interest free loans to include cooperative and joint venture funds for aid projects, commercial loans and investments, and special trade preferences. Given that China, unlike other development assistance committee (DAC) donors, does not publish its aid statistics, it is even more difficult to exactly estimate its aid volume to Ethiopia.

Chinese development assistance to Ethiopia differs from western development assistance in many ways. Firstly, Chinese assistance is based on the principles of political non-interference and equal partnership that brings mutual benefits. Secondly, as noted earlier, it is demand driven, that is, based on the requests from the recipient country; hence, it is easy to align Chinese development assistance with national development priorities (Jalata 2014, 29). However, the most striking feature of Chinese development assistance is its commercial orientation. China emphasises "win–win co-operation" rather than the traditional donor–recipient relationship. Its foreign aid, trade and investment programs are also closely coordinated, and it uses its development assistance to promote its trade and investment activities. There are some other advantages of China over western donors such as less bureaucratic hurdles and faster aid disbursals.

In Table 2, China's aid flows to Ethiopia have been estimated by adding the value of all completed Chinese official projects as well as projects under implementation in Ethiopia. Barring the exception of 2001, when China canceled US$203.8 million of Ethiopian debt, Chinese official financial flows to Ethiopia were at moderate levels till 2005. Things began to change from 2005 onwards, and by 2012 the total value of Chinese official financial flows to Ethiopia was US$3,612 million. While aid flows from traditional donors have also grown rapidly during this period, China has emerged as Ethiopia's largest bilateral donor and has also increased Ethiopia's bargaining power vis-à-vis traditional donors substantially.

Chinese development assistance is concentrated in infrastructure. Two sectors, namely energy supply and generation and transport and storage, account for 68.3% of Chinese official financial flows to Ethiopia. Out of this, 46% of Chinese official flows have been directed to energy generation and supply. This

Table 2 Chinese Development Assistance to Ethiopia from 2000 to 2012 (Value in US$ Million in 2009)

2000	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*Total*
0.4	209.6	84.1	24.1	19.4	0.2	690.0	183.9	106.2	651.5	—	419.0	1,223.8	3,612.2

Source: Compiled from China aid data website, accessed September 11, 2014, http://china.aiddata.org/projects?country_name%5B%5D=Ethiopia&is_stage_one=Is+not+Stage+One&page=3&scope_names%5B%5D=Official+Finance&search=&utf8=%E2%9C%93.

includes projects related to construction of dams, wind farms, electric substations, extension of power lines and installation of bio-gas appliances. Five out of the 10 energy generation and supply projects are funded by the Export–Import Bank of China, and all the 10 projects are being implemented by Chinese companies. Transport and storage sector accounts for 22.4% of Chinese official finance to Ethiopia. The majority of the transport projects are funded by three Chinese institutions, namely the Export–Import Bank of China, Chinese government and China Development Bank, and Chinese companies are implementing most of these projects.

On the other hand, agriculture, which is the mainstay of the Ethiopian economy, has received scant resources from China. The share of agriculture, forestry and fishing in China's official finance to Ethiopia was merely 0.2%. Brautigam and Tang (2012) also note that Chinese assistance to agriculture in Ethiopia is quite small, although Chinese engagement in agriculture and rural development in Ethiopia is longstanding. The volume of Chinese official financial flows directed to industry was also paltry with a share of only 2.9%. There are only three industrial projects in Ethiopia, out of which the largest is the construction of the Ethiopia Oriental Industrial Park, jointly funded by the Export and Import Bank of China, and China Development Fund.

Notwithstanding the crucial role played by Chinese development assistance in Ethiopia's economy by enabling infrastructure development and import of capital goods, there are concerns about debt sustainability because loans comprise about 89% of total Chinese development assistance to Ethiopia.[5] According to figures from Ethiopia's Ministry of Finance and Development, Chinese loan disbursals grew very strongly in a short span from US$6.8 million in 2006–07 to US$1,322.5 million in 2012, and surpassed disbursals from multilateral and bilateral sources. Loan disbursals from Italy and India, the other major bilateral donors, are negligible.

In addition, a number of other issues have been raised by various researchers. Most studies have regarded "tied aid" as a big problem for Ethiopia. Procurement of materials from China also hampers the growth of local suppliers. Moreover, Chinese companies have been criticized for excessively employing Chinese

professionals. The locals are usually employed in administrative and low paid jobs, which hampers technology and skill transfer. There are numerous examples mentioned in the literature of Chinese projects not being won through competitive bids but through tied aid. According to Gill and Reilly (2007, 49), some Chinese construction firms make unprofitable bids to get a foot in the door for future undertakings. Geda (2008) contends that Chinese involvement in telecommunication, road and power plant construction projects in Ethiopia displaced local and foreign construction firms through very low initial bid prices as well as offering credit to finance such projects, but low initial bids are often offset by high operational costs. Also, Chinese credit in big projects is almost on commercial terms. Many authors have raised the issue of the quality of Chinese projects. Gill and Reilly (2007, 48) assert that Chinese firms prioritize completing projects as quickly and cheaply as possible, which often results in lax safety, quality and labor policies. Jalata (2014) points out that the Chinese tendency to merge aid, trade and investment flows undermines the leverage of African countries and skews the aid relationship in favor of the Chinese, enabling China to leverage considerable trade and investment interests from African countries. However, all these observed challenges above are not unique to China. Many of the concerns listed above hold true for other donors as well.

Chinese FDI in Ethiopia

Many studies have de-emphasized the role of Chinese FDI in Africa. According to these studies, Chinese investment in Africa is characterized by large-scale investment in oil, gas and mining sectors by state-owned enterprises and significant Chinese government involvement. However, recently a few studies such as Shen (2013) have challenged this view. Despite being an agricultural exporter, Ethiopia has attracted significant volumes of Chinese FDI. FDI from China to Ethiopia increased from a trivial value of US$0.98 million in 2003 to a high of US$121.5 million in 2012 (Table 3). The share of Chinese FDI flows to Ethiopia grew rapidly from a mere 0.2% in 2003 to 10.8% in 2013. The stock of Chinese investment in Ethiopia has also registered a significant increase. In 2013, Chinese FDI stock in Ethiopia stood at US$607 million in 2012, which constituted about 11.9% of the total FDI stock in the country. FDI flows from India stood at US$6 million in 2013 which is minimal as compared with China. The FDI inflows from OECD countries are insignificant, and Table 3 also indicates disinvestment in the case of many countries such as the Slovak Republic, Sweden, Italy, Germany and Belgium.

Contrary to the popular wisdom which suggests that Chinese investment in Africa is led by state-owned enterprises, 69% of the Chinese enterprises in Ethiopia are privately owned, 15% are private joint ventures with an Ethiopian partner and

Table 3 FDI Inflows (in US$ Million) in Ethiopia, by Geographical Origin from 2003 to 2013

	2003	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*
Turkey	—	—	—	—	—	3	5	0	0	0	1
UK	—	—	14.7	16.4	—	—	—	—	—	—	11.1
US	2	1	1	–2	1	0	0	1	5	4	4
Slovak Republic	—	0	8.5	1	–0.7	0.8	0.7	—	0	0	0
Sweden	–0.1	–0.1	–0.3	–0.3	–0.1	0	–0.3	–0.3	0	–0.2	–0.3
Korea	—	—	—	—	—	—	—	—	—	0.1	0.1
Italy				1.2	1.3	1.4	40.8	32.2	9.7	8	–38.8
Germany	–3.8	9	–1.2	–2.5	1.3	5.5	2.9	2.8	–5.3	–22.3	7.7
Belgium	—	—	—	—	—	—	—	—	1.4	–1.3	—
OECD Total	–1.9	9.8	22	15	3.8	11.4	49.1	35.8	10.2	–9	–16.5
China	1	0.4	4.9	24	13.3	9.7	74.3	58.5	72.3	121.6	102.5
Total	465	545.1	265.1	545.3	222	108.5	221.5	288.3	626.5	278.6	953

Source: Total FDI inflow figures are from UNCTAD database, FDI inflow figures from OECD countries are from OECD Statistics (http://stats.oecd.org/Index.aspx?DataSetCode=FDI_FLOW_PARTNER#), and Chinese FDI figures are from CEIC database.

Note: FDI = foreign direct investment; OECD = Organisation for Economic Co-operation and Development.

only 13% are Chinese state-owned, which are typically engaged in the construction and transportation business (World Bank 2012). Chinese private investment in Ethiopia is typically directed to the manufacturing sector. Out of the 69 companies surveyed by the World Bank, 45 are manufacturing firms, 13 are construction and transportation firms and 11 are engaged in service sectors (ibid.). According to Shen (2013), 60% of all Chinese projects in Ethiopia are in the manufacturing sector followed by the wholesale and retail trade sectors that account for 28% of all Chinese projects in Ethiopia. Geda and Meskel (2010) also find that most of the Chinese firms are concentrated in manufacturing, construction and real-estate sectors.

The driving force behind the growth of Chinese investment in Ethiopia's manufacturing sector can be traced to a number of developments in China and Ethiopia. Increased pressure of industrial restructuring in China due to rising wage rates in coastal China is driving labor-intensive firms to Ethiopia and other African countries (Shen 2013; World Bank 2012). On the other hand, Ethiopia offers a number of advantages. Labor costs are exceptionally competitive in Ethiopia because the average wage rate is less than a quarter of that in coastal China, and local workers particularly female workers are easily trainable (Shen 2013). Market access has also played a pivotal role in attracting Chinese enterprises to Ethiopia. Shen (2013) gives

the example of a blanket weaving factory in Ethiopia which "can sell as much as it can produce in Ethiopia." Many Chinese investors are also attracted by the neighboring African and Arab markets. The proximity to Europe is also an important factor for textile and footwear manufacturers. For Huajian shoes, access to cheap labor and protected markets is the major pull factor. Shen (2013) also reports that Chinese firms are content with the policy stability, and the efforts made by the Ethiopian government in accommodating the interests of the investors.

One of the major criticisms of Chinese investment is that local job creation is limited due to employment of Chinese professionals. On the other hand, a few recent survey-based studies claim that the spurt of Chinese enterprises in Ethiopia has created significant employment opportunities for Ethiopians in the manufacturing sector. The World Bank survey of 69 Chinese companies in Ethiopia found that employment size has increased by 19% since the end of 2008, and Chinese companies employed 15,910 permanent full-time Ethiopian employees and 7,813 seasonal or temporary workers in 2011 (World Bank 2012). The World Bank survey also found that 69% of the Chinese companies provide formal training programs for the Ethiopians, and about 11,314 workers gained from such training programs. According to Shen (2013), 290 Chinese firms provide 35,000 regular jobs and nearly 40,000 seasonal jobs.

Other criticisms of Chinese FDI are associated with high import content of Chinese firms and little technology transfer. The production processes of Chinese firms are heavily dependent on imports of materials and supplies from China due to the underdeveloped supply chain systems in Ethiopia (World Bank 2012). This also contributes to Ethiopia's growing import bill from China.

Although China has been severely criticized for acquiring large tracts of land in African countries, Chinese agricultural companies have played a minor role in Ethiopia. This is particularly important in the context of Ethiopia because the government has leased large tracts of land to foreign and domestic investors with the aim of achieving long-term food security and encouraging export-oriented agriculture. There is only one Chinese agricultural company, Huana Dafengyuan, in the list of 34 large-scale land transfers listed on the Ethiopian Agricultural Portal (MoA 2014). Huana Dafengyuan Agriculture acquired 25,000 ha of land in Gambella to produce sugarcane in 2002, which constituted only 6% of the total land leased to foreign and domestic investors in Ethiopia. Brautigam and Zhang (2013) and the Oakland Institute (2011) also made similar observations.

Impact of China

Ethiopia's story is a strong rebuttal to Zafar (2007, 113) who predicted that coffee producing and oil importing countries such as Ethiopia will be adversely affected

by China because China accounts for less than 1% of global coffee and cocoa consumption, and these African countries do not have a strong comparative advantage in the production of any of China's main agricultural imports—wheat, corn, beef and soybeans. Interestingly, Ethiopia can hardly be described as a coffee exporter any more. Although coffee still accounts for the bulk of its export earnings, its importance has declined rapidly in the last few years. Ethiopia has been successful in diversifying its export basket and is now exporting a number of new agricultural commodities. It gained immensely from China's zero-tariff policy on agricultural imports from Africa's least developed countries, and China is now Ethiopia's largest export destination because of the dramatic growth in exports of sesame seeds. Although Chinese development assistance to agriculture is limited, it has contributed by way of technical cooperation and experience sharing. The Ethiopia–China Agricultural Technology Demonstration Center and the provision of Chinese instructors on agricultural technical vocational education and training (TVET) are two main initiatives in this regard.

Apart from sesame seeds, China has proven to be a good source of additional demand for leather. Moreover, Ethiopia gained from value addition in the leather sector. Its exports of tanned leather increased rapidly as a result of the domestic policy changes which allowed foreign investment and imposed heavy export duty on the export of raw hides and unprocessed leather. In the last couple of years, it has also started exporting footwear. Its footwear exports are likely to increase in future with the establishment of Huajian Shoe Company. China leads all other countries in terms of the number of FDI investments, and Chinese investments have contributed to employment generation and transfer of technology and skill. Although Gebre-Egziabher (2007) argues that domestic footwear manufacturers, particularly micro-enterprises, have been adversely affected by Chinese imports and led to job losses, his study also found that competition with China improved the designs of local manufacturers, and some of them did manage to withstand Chinese competition. Therefore, overall Chinese influence in the leather sector may be regarded as positive because the benefits outweigh the negatives.

Chinese FDI flows to Ethiopia have also grown tremendously. Although they are still small as compared with Chinese official financial flows, Chinese FDI flows have outstripped FDI flows from developed countries. Given that Chinese FDI is mainly directed to the manufacturing sector, it has the potential to kick start Ethiopian industrialization through the "flying geese" model that underpinned industrialization in Southeast Asia. According to Brautigam (2007), the "flying geese" model depends on three factors: push from the home country, a favorable policy environment in the host country, and local investment by the lead goose and joint ventures that spread knowledge to capable local entrepreneurs. Some of the conditions can already be found in Ethiopia. Firstly, average wage rate in China has risen in recent years, whereas the

average wage rate in Ethiopia is much lower, which is Ethiopia's major pull factor. Secondly, the Ethiopian government has encouraged FDI and has provided an enabling environment for foreign investors. Lastly, there has been some growth with regard to technology and skill transfer in the leather and leather manufacturing sector though there are fewer Ethiopia–China joint ventures in operation at present.

The dramatic growth of manufactured imports from China can also be termed as welfare enhancing for the Ethiopian population, at least in the short run, since it is extremely poor and stands to gain from Chinese goods which are cheap. The main losers in this case are the developed countries, namely Germany and Italy, because exports from India have also grown rapidly in the last decade. Ethiopia has a very poor industrial base, except perhaps for leather in which it has some edge. Therefore, the argument that the flood of Chinese goods will damage domestic industries does not hold for Ethiopia at all. Imports of capital goods such as machinery and transport equipment are also beneficial for the Ethiopian economy.

However, the largest impact of China on Ethiopia comes from its official financial flows. China is now Ethiopia's largest bilateral donor. Its loan disbursal to Ethiopia in 2013 was even greater than that of all multilateral sources taken together. As observed earlier, Chinese financial flows are mainly directed to critical infrastructure, such as roads, telecommunications and power generation. Given Ethiopia's severe shortage of infrastructure and the reluctance of western donors to provide assistance for infrastructure development, Chinese official finance is imperative for Ethiopia's long-term development. Chinese investment in infrastructure has helped build Ethiopian roads and has augmented the country's energy generation and supply capacity which is absolutely crucial for successful industrialization.

Regardless of the above-mentioned benefits, there are some concerns with regard to the lopsided nature of Ethiopia–China trade relations and debt sustainability. Ethiopia's trade deficit with China has widened at breakneck speed after 2005. This is largely due to the fact that Ethiopia's imports, particularly machinery imports, grew phenomenally after 2005, whereas it mainly exports one commodity to China. There are similar concerns with regard to Chinese official financial flows, the bulk of which comprise soft loans for infrastructure. But given that official flows are directed towards infrastructure development and procurement of capital equipment, Ethiopia is likely to gain through increased productivity. Moreover, improved transport network and energy generation capacity would contribute to the process of industrialization in Ethiopia.

Conclusion

Ethiopia's case does not conform to the existing narrative on China–Africa relations which focused on China's resource interests in Africa. According to

Kaplinsky, McCormick, and Morris (2007), China predominantly imports oil and hard commodities from a limited number of sub-Saharan African countries and exports manufactures, mostly final consumption goods. However, the Ethiopian case shows that China's interest in Africa is not limited to resources. The desire to establish export markets for China's light manufactured goods and transport and machinery goods and encourage Chinese construction companies dominates. Contrary to the belief that only oil producers such as Nigeria, Angola, Sudan and Equatorial Guinea have been the biggest recipients of Chinese aid, we find that Ethiopia has also received huge volumes of Chinese aid. A few authors such as Adem (2012) argue that Ethiopia's diplomatic importance allures China to Ethiopia. In fact, he goes on to typify Ethiopia–China relations as a case of "infrastructure for diplomatic support" akin to the phenomenon of "infrastructure for natural resources" found in China's relations with many African countries. Notwithstanding Ethiopia's diplomatic importance, it is difficult to undermine the fact that Ethiopia presents itself as a large market for manufactured goods, machinery and capital equipment and infrastructure building.

Intensification of China–Ethiopia relations has proven to be beneficial to Ethiopia. Ethiopia has gained tremendously from China's zero-tariff policy on agricultural commodities for the least developed countries, and sesame exports to China now account for a large part of its foreign exchange earnings. Chinese development assistance is helping Ethiopia to access machinery and capital equipment and build critical infrastructure. This explains the huge increase in Ethiopia's imports of Chinese machinery and transport equipment from 2005 onwards and can be regarded as the major reason behind Ethiopia's widening trade deficit with China. Chinese-built roads have helped in agrarian diversification and poverty alleviation. Imports of capital goods from China will enhance the competitiveness of Ethiopia's manufacturing sector.

Similarly, the role of Chinese private enterprises in Africa was also undermined by early studies. For instance, Broadman (2008, 100) states that Chinese investments in Africa are typically large-scale oil or mineral exploration projects which are capital intensive and create few new jobs. Chinese FDI to Ethiopia is largely efficiency seeking and market seeking. Chinese private investment has emerged as an important source of additional investment for Ethiopia at a time when bilateral FDI flows from developed country partners, which were miniscule to begin with, have declined. Chinese FDI has created employment opportunities, contributing to technological sophistication and technology and skill transfers. The only sector in which Ethiopia has an advantage, the leather sector, also witnessed technological upgradation. Its exports of processed leather increased with the inflow of Chinese FDI. Footwear exports are also likely to increase in future years with the establishment of Huajian. Thus, Chinese investment indeed has the potential to kick start

Ethiopian industrialization. Ethiopia could specialize in low-skilled manufacturing industries as China graduates to the production of more sophisticated goods.

The Ethiopian population, which is extremely poor, also stands to gain from imports of Chinese manufactures because Chinese goods are relatively cheap. In addition, purchase of capital goods and transport equipment from China at lower prices has lowered investment costs which has benefited Ethiopia's infrastructure significantly.

Ethiopia's growth story reaffirms the importance of the state in economic development because the government has been at the center of Ethiopia's economic turnaround. Its policies facilitated technology upgradation in the leather value chain. China has a huge positive impact on the Ethiopian economy, and in many ways China's engagement in Ethiopia can be regarded as a "win–win" situation. However, the extent to which long-term gains accrue to Ethiopia depends on the ability of the state to push forward its own development agenda. The government should encourage the development of efficient supply chain systems in Ethiopia to reduce Chinese imports, encourage domestic production and create more employment opportunities for Ethiopians. Moreover, Chinese-funded projects should be evaluated to ensure good quality, and the Ethiopian government should bargain hard for joint ventures to hasten technology transfer and employment of local professionals.

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Notes

1. Author's estimates from World Economic Outlook data.
2. Author's estimates from Food and Agriculture Organization data.
3. Author's estimates from Food and Agriculture Organization data.
4. Author's estimates from CEIC database.
5. Author's estimates from data on China's development assistance to Ethiopia from http://china.aiddata.org/.

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CHINA AND LATECOMER INDUSTRIALIZATION PROCESSES IN SUB-SAHARAN AFRICA

A Case of Combined and Uneven Development

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Abstract: This article examines the question of how China's systemic impact on the world economy and growing presence in sub-Saharan Africa (SSA) affects processes of structural change in SSA countries through the framework of combined and uneven development: Global economic forces can act to perpetuate underdevelopment, but these global forces, of which China's rise in the world economy is one among many, need to be studied in conjunction with the societal forces that mediate them. This article argues that many China-related effects actually work in favor of manufacturing development, but the size and composition of China-related effects vary considerably across countries. Therefore, the article uses cluster analysis to find groups of SSA countries with similar patterns of interaction with China and shows that we do, indeed, observe differences in average manufacturing output growth across these groups. However, the cluster analysis also reveals considerable variations within the groups of countries with similar China-related effects. The article provides a case study on Angola to illustrate the interplay between global factors linked to China and the domestic political economy setting.

Key words: industrialization; China–Africa; industrial policy; Angola; flying geese

Introduction

The relative decline of U.S. hegemony and the rise of other countries such as China have inspired discussion about what this shift towards a multipolar world

order means for the prospects of development of low- and middle-income countries (Desai 2013). This context shapes the much polarized debate on how China affects industrialization in sub-Saharan Africa (SSA). On the one hand, China is seen as blocking the stepladder to industrial development by outcompeting African manufactures (Kaplinsky 2008). On the other hand, China is seen as a "golden opportunity" for industrialization in SSA as its own industrial upgrading frees up jobs in labor-intensive manufacturing, which—combined with an increasing number of Chinese investments and infrastructure projects in SSA —could ignite local industrialization (Lin 2012).

Within this debate, it is equally important to establish which types of manufacturing production economic ties with China might further, given that labor-cost-seeking relocations of production intrinsically imply a process of uneven development within hierarchical systems of global production structures. Accumulation logics focusing on cheap labor resources might lead to the emergence of a basic manufacturing base but may not allow for reaching knowledge and research-intensive activities that are the basis for the growth of income and wages (Hart-Landsberg and Burkett 1998; Frobel, Heinrichs, and Kreye 1976).

Empirically, we observe large differences in manufacturing output growth across SSA. Some SSA countries, including Angola, Equatorial Guinea, Liberia, Mozambique, Lesotho and Gabon, more than doubled the manufacturing output per capita (comparing 2011 levels to a 1996–2000 average). A number of other countries (Congo-Brazzaville, Tanzania, Ethiopia, Sudan and Nigeria) experienced growth of manufacturing output per head of 60% or more over that period, while the remainder—and thus the majority of SSA countries—have experienced either a negligible rise or even a fall in their manufacturing output per capita (based on United Nations National Accounts Database).

What type of manufacturing growth is occurring and can any of these differences in manufacturing growth be linked to China's systemic impact on the world economy and/or China's growing presence in SSA? There are three analytical challenges here (reflected in Figure 1). Firstly, the discussion on China's potential impact on manufacturing output refers to diverse and even contradictory effects, which differ in size and distribution across SSA countries. Secondly, what can be explained by differences in policy mediation across SSA countries? While global trends matter, domestic policy plays an important role in shaping their effects on the domestic economy. Thirdly, are there other factors that shape the world economy?

This article draws on the framework of uneven and combined development which can take simultaneous account of the world economy as well as domestic dynamics. The article proceeds as follows: the next section discusses how China changes the external context of industrialization and identifies the most relevant

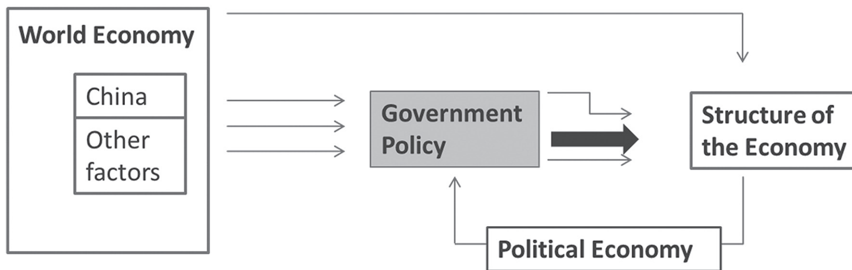

Figure 1 China's Systemic Impact on the World Economy

"China effects." The third section then uses cluster analysis techniques to find groups of SSA countries with similar patterns of interaction with China and shows that we do, indeed, observe differences in average manufacturing output growth *across* these groups, and *within* them. It is thus necessary to analyze country-specific factors, in particular the political economy setting and industrial policies of SSA countries in greater detail to understand how China's economic presence in the world economy affects prospects for industrialization in SSA countries. The fourth section provides a case study of Angola to show that emerging forms of manufacturing production come out of the changing global economic context combined with changing domestic dynamics in the post-civil war context. We observe the formation of a market for building materials on the back of Chinese infrastructure projects as well as the formation of a consumer demand base as a result of rising per capita incomes from the commodity price boom. At the same time, elite interests transition from pure rentierism to capitalist forms of accumulation.

A Changing World Order: China's Impact(s) on the Prospects of Manufacturing Sector Development in SSA

Late Industrialization as a Problem of Uneven and Combined Development

The analytical challenges outlined in the introduction reflect an ontological challenge inherent in development theory in general, namely the question of what weight should be given to systemic factors acting on a global scale and factors that are specific to individual societies. Extrapolation should be consistent both ways, that is, research should be able to explain how country-specific dynamics link to and are influenced by systemic factors, but it should also be able to explain how the study of systemic factors can be disaggregated, that is, leave room for explaining why systemic factors affect different countries unequally. Drawing on Trotsky's concept of uneven and combined development, geopolitical economy

approaches attempt to strike this critical balance. They recognize that unevenness is a systemic aspect of capitalist development because the latter entails the search for new sources of primitive accumulation (e.g., cheap labor or colonial extraction of resource wealth) as well as competitive pressures among commodity producers. Yet external constraints are combined with pre-existing internal dynamics and class structures, which determine how capitalism's contradictions are managed through domestic policy (Asham 2012).

Applying these insights to industrial development, we find the same kind of interaction between external and domestic factors. While late developers can, at least in theory, skip whole stages of technological development, technology acquisition is uneven and depends on the investment motives of foreign firms (looking for new sources of primitive accumulation or new market outlets?), the bargaining position of countries to negotiate technology transfer (Chang 1998) and the absorptive capacity of the economy. The latter is based not only on the quality of education and infrastructure (Lall and Narula 2004)[1] but also on *tacit knowledge* of how to operate machines and tacit organizational capabilities of a firm (e.g., how to set up teams to ensure a smooth production). These tacit components of firm-level productivity are the result of a process of learning by doing and can only be acquired through the production process itself. Various forms of policy support, such as subsidies on inputs, credit direction or tariff protection, are therefore needed to ensure that production can take place before competitiveness is reached (Khan 2013). No wonder all major accounts of late-industrialization in East Asia stress the necessity of a significant level of state guidance (Chang 2002; Amsden 2001; Wade [1990] 2004).

In addition, manufacturing sector growth is dependent on and therefore constrained by demand for its products (Kaldor 2007). Productivity increases in manufacturing are invariably linked to the scale of production.[2] Yet mass production also requires mass consumption making late industrialization as much a problem of increasing demand capacity as of building up supply capacity. With exports providing market outlets and being a source of foreign exchange, expanding and upgrading exports is seen as a solution to demand constraints on manufacturing output growth and therefore as a key to successful late industrialization (see, for instance, Cimoli and Porcile 2013; Amsden 2001). Trade structures are a source of unevenness in this respect: in line with the Prebisch-Singer hypothesis, developing countries generally import higher-value-added goods than they export. Hence, imports will have a tendency to outgrow export earnings unless the structure of production changes to allow for higher-value-added exports (Thirlwall 1986).

How manufacturing export capacity is built is therefore crucial. Relocation of labor-intensive low-value-added export industries to low-cost countries implies an intrinsically uneven process of development. Being driven by the search for cheap labor, these flying-geese investment patterns reflect systems of hierarchical

production and investment, in which competitive pressure on labor (in peripheral and core countries) intensifies while the technological and financial core remains under control of capital in developed countries (Hart-Landsberg and Burkett 1998). With investments following a logic of primitive accumulation, for countries at the rear end of the flying-geese formation, productivity increases are not fast enough to reach knowledge and research-intensive activities. At the same time, underconsumption problems arise as the incomes generated from this type of industrial activity are too low to sustain production for the domestic market. Finally, there is a problem of simultaneity ("fallacy of composition") because the total expenditure of developed countries for low-value-added manufacturing goods is limited and developing countries engaging in intense competition over highly substitutable manufacturing products cause intense price competition, competitive devaluations and wage depression (Onaran 2011). Amsden (1990) maintains that this does not pose a problem for as long as supply capacity is developed in higher-value-added sectors and the export structure gradually upgraded. But again, while this can prove a convincing strategy for one country, it cannot become one for all countries because this flying-geese-type process must necessarily happen at unequal speed (and therefore systematically exclude some countries).

One way to break away from the underconsumption and balance of payment constraints is by adapting and adopting imported technology for domestic market production. Thus, domestic market formation has to go together with an expansion of exports to international markets to sustain the process of industrialization (Lo 2011). Post-Keynesian theories suggest that income distribution plays an important role in this respect. The intuition is simple: when the demand base is very narrow manufactured goods are only sold to the relatively few rich. Given their small numbers, they cannot sustain demand for mass production. Hence, a very unequal distribution of income between wages and profits can lead to a short fall of demand for industrial output, which, in turn, limits investment and decelerates manufacturing output growth (Dutt 1984). Therefore, policy should not just accelerate technology acquisition but also support increases in demand capacity by promoting linkages between different sectors of the economy and pursuing redistributive policies such as labor market policies and housing policies.

How such technically desirable policy measures come about depends, in turn, on the power relations unique to each specific country setting. Structural transformation is a process of social transformation. Understanding how specific vested economic, political and ideological interests come about and change over time, and, indeed, how they determine what the state does and might do, is indispensable to determine what is or should be the role of the state (Fine 2013). Figure 2 illustrates this interplay between the world economy and the domestic political economy and policy.

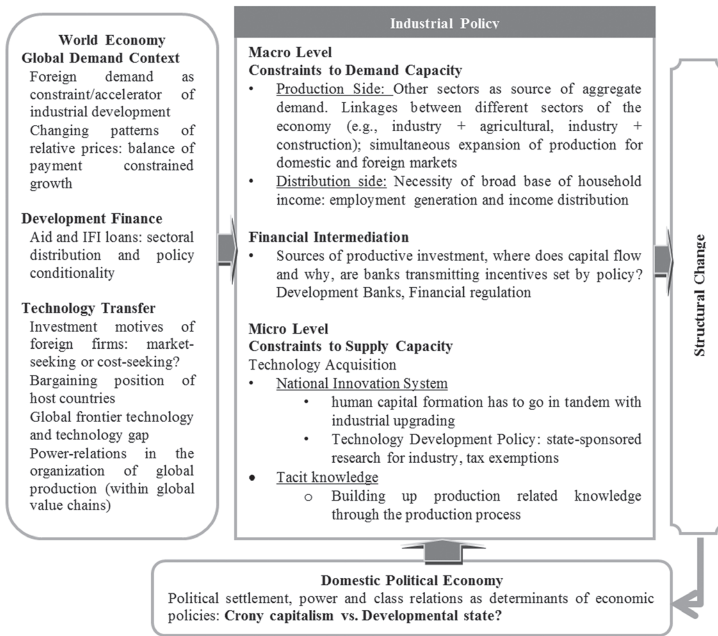

Figure 2 Interplay between the World Economy and the Domestic Political Economy and Policy
Note: IFI = International Financial Institutions.

The remainder of this article will investigate the interaction between external influences and domestic policies, and how this interaction affects industrialization in SSA. As set out in the introduction, China's rise in the world economy and growing presence in SSA countries has been controversially discussed as a game-changing element. However, China is seen to perpetuate or even reinforce unevenness inherent in capitalist development, notably by blocking the path to export-led industrialization and by locking African countries into unfavorable trade structures which make it harder to diversify towards higher-value-added products. On the other hand, potential relocations of labor-intensive industries based in China and the entrepreneurial activities of Chinese nationals are seen as an impetus to African industrialization. Underlying these antipodal stories is both a disagreement over which out of a multitude of China-related effects is most important, as well as a controversy over what drives and sustains inclusive economic growth.

The following sections will argue that we find both forces reinforcing unevenness and counteracting it. While there is evidence for flying-geese-type relocations of labor-intensive export-oriented industries, Chinese investments also support other types of manufacturing production as well as productivity enhancing knowledge and skill transfer. While Chinese manufacturing has been shown to

outcompete African products on world and domestic markets, for some countries, Chinese demand for raw materials, favorable commodity prices as well as inter-sectoral demand and employment generation due to Chinese construction projects supports domestic market formation. How these forces will play out depends on the predominant China-related effects in any individual country as well as their mediation through domestic policy.

Chinese Investments: A Scramble for African (Labor) Resources?

The fact that Chinese economic and diplomatic ties with Africa are motivated by attempts to secure access to natural resources (Klare and Volman 2006) has raised concerns about African countries being exposed to new forms of colonialism (Quinn and Heinrich 2011) and a new scramble over their resources (Frynas and Paulo 2007). Counter arguments hold that China's own industrial upgrading frees up jobs in export-oriented light manufacturing, which could ignite industrialization (Lin 2012). Yet even this type of engagement could be seen as a scramble for African resources, this time labor resources (a "scramble for Africans"; see Meagher 2016), within the context of a global race to the bottom in terms of labor standards and remuneration.

In 2014, 13.6% of Chinese foreign direct investment (FDI) stocks in Africa are in manufacturing activities (Figure 3). Manufacturing sector investments even amount to as much as 31% of Chinese private FDI in 2013 (Shen 2015). Among these investments, we find labor-cost-seeking investments in export-oriented light manufacturing such as apparel and footwear, especially in Eastern and South-Eastern Africa. However, they remain small to medium in scale, with few exceptions like the China JD group in Tanzania and the Huajian shoe factory in Ethiopia (Tang 2014).

While flying-geese-type relocations of labor-intensive industries from China to Africa are observable, Chinese investments also support other forms of manufacturing production. In fact, the majority of Chinese manufacturing investments in SSA come out of and further support domestic market formation. In particular, Chinese investments have been shown to be primarily attracted by the domestic consumer market (Shen 2015; Gu 2011; Warmerdam and van Dijk 2013; Huang and Ren 2013; Seyoum, Wu, and Yang 2015). Even in Ethiopia, often presented as emblematic for flying-geese-type relocations of Chinese labor-intensive industries (Geiger and Goh 2012), about 84% of Chinese manufacturing firms in Ethiopia are local market seekers (Seyoum, Wu, and Yang 2015). The most frequently mentioned investment motive of the 45 Chinese manufacturing firms in Ethiopia interviewed by Geiger and Goh (2012) is the "local market in Ethiopia." "To take advantage of cheap labor in Ethiopia" is ranked on average "neither agree nor disagree" among Chinese manufacturing firms, though Chinese firms in the service sector "strongly agree" (Geiger and Goh 2012).

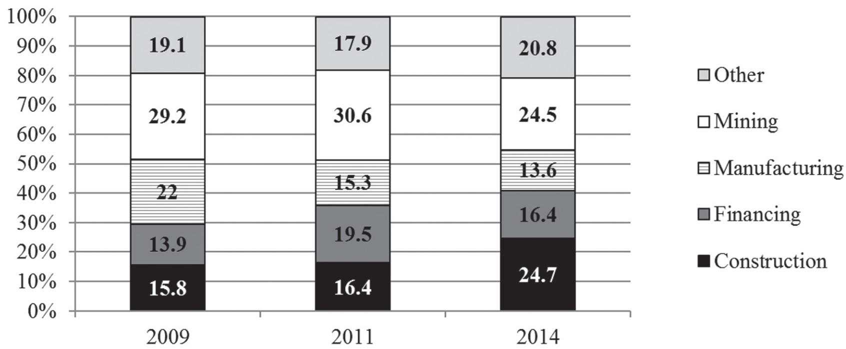

Figure 3 Sectoral Distribution of Chinese Foreign Direct Investment to Africa by Selected Years (% of Total Stocks)

Source: Statistical Bulletin on Chinese Outward Foreign Direct Investment, various years.

Other than market-seeking manufacturing investment, Chinese FDI in SSA is attracted by natural resource wealth. In fact, 68% of Chinese outward foreign direct investment (OFDI) stocks in SSA are in resource-rich countries (calculations based on China Statistical Bulletin of Outward FDI 2013).[3] Mining- and construction-related investments make up for a high share of Chinese OFDI in Africa. The two sectors account for 49.2% of total stocks in Africa in 2014. However, the share of mining-related investments actually falls from a high of 30.6% in 2011 to 24.5% in 2014. Equally noteworthy, the share of mining-related activities in Chinese OFDI is actually *below* the SSA average, mining accounting for as much as 35% of total FDI to SSA in 2012 (United Nations Conference on Trade and Development 2015). What is more, even resource-seeking investments are shown to operate with a long time horizon. For instance, being more interested in the use value than in the market value of copper, Chinese state-owned enterprises (SOEs) have bought the least performing mine in Zambia that could not attract any investors after privatization and lay idle for 13 years. Contrary to their London Stock Exchange listed counterparts, the Chinese-owned mines did not lay off workers and maintained both production levels and salaries in face of the 2009 bust in copper prices (Lee 2014).

The relative decline in mining-related investments is explained by the rise of construction-related investments, which, by the end of 2014, overtake mining in China's OFDI stock in Africa (Figure 5). In terms of flows, mining-related investments come only fourth in 2014 after construction, transportation/storage/postal service and manufacturing. In 2014, Chinese OFDI flows to construction in Africa are over US$759 million which is about US$340 million more than the flows to mining (MOFCOM 2015, 99).

Some spillover effects of Chinese investments are observable. Seyoum, Wu, and Yang (2015) find that Chinese FDI in Ethiopia is positively correlated to domestic firms' productivity, when the technology gap is small. Furthermore, a survey of over 250 Chinese overseas enterprises, of which 27% invest in Africa, finds that 87% have transferred technologies or have technology cooperation with host countries (United Nations Development Programme, State-owned Assets Supervision and Administration, and MOFCOM 2015, 57). The Rwandan government, for instance, has negotiated technological upgrading and transfer of expertise with ZTE and Huawei, as part of the broader government strategy to enhance the country's information and communications technology sector (Gu and Carty 2014). In addition, Chinese firms, contrary to popular belief, engage in training of local labor (Shen 2015). The Chinese government encourages large SOEs to train local labor to improve its image abroad, while private firms often find training local labor more cost-effective than importing staff from China. Evidence from Angola, for instance, shows that the number of semi-skilled workers such as brick layers and masons on Chinese construction projects increases (Corkin 2011).

Between Reduced Scope for Export-Led Growth and Domestic Market-Led Industrialization

Chinese investments might not lock African countries into a relationship of resource extracting colonialism or flying-geese-type production chains, but there is, indeed, a good case that China blocks the stepladder to export-led growth for SSA countries (Kaplinsky 2008). Even at SSA's current low levels of exports, evidence suggests that a 1% increase in Chinese exports is associated with a reduction of –0.07% in African exports on world markets of the same products in the same time period (Giovannetti and Sanfilippo 2009). In this context, building the backbone of a dynamically expanding manufacturing sector by harnessing the domestic-demand potential for manufacturing products becomes a crucial challenge for late industrialization. Various aspects of China's economic engagement with SSA support domestic market formation.

Firstly, reduced scope for export-led industrialization does not necessarily imply a reduction in export earnings. On the contrary, for some countries, Chinese demand for raw materials has a positive effect on their balance of payment position and capacity to import capital goods. Bagnai, Rieber, and Tran (2012), for instance, find that, on average, the balance of payment-consistent growth rate[4] in SSA countries has increased from 2.2% in the period 1990–99 to 5.4% in the period 2000–2008. About a third of this relaxation was due to the expansion of export markets in "developing Asia" (an aggregate of China and 13 other countries in low and lower-middle-income countries in South and Southeast Asia; Bagnai, Rieber, and Tran 2012).

Further, China has an indirect impact on the external demand constraint through changes in world market prices for primary commodities and manufacturing products. China's demand for raw materials had spurred world market prices for hard and energy commodities. At the same time, Chinese manufacturing also puts a downward pressure on world market prices for manufactures (Kaplinsky and Farooki 2012). As a result, SSA countries producing mineral and energy commodities benefit—at least temporarily—from an improvement in their terms of trade and a (temporary) reversal of the Prebisch-Singer hypothesis. Figure 4 illustrates this broad trend: from the early 2000s onwards, on aggregate, terms of trade of SSA countries have improved.

Improved terms of trade and higher export demand make it easier for some countries to finance capital goods imports, if policy channels the export earnings into productive investments not, for instance, imports of luxury consumption goods.

Recent developments, including a slowdown of Chinese growth and fall in raw material prices, underline that the positive effects of Chinese demand on SSA countries' export earnings will not last forever and may weaken over time. Given this, it is particularly important to note that, secondly, beyond FDI, Chinese firms engage in a particular form of cooperation called "overseas contracted projects." These can induce demand for the production of building materials and support employment generation, thereby broadening the demand base in the economy.

Broadly speaking, Chinese overseas contracted projects (COPs) are construction projects carried out by Chinese firms in third countries financed through

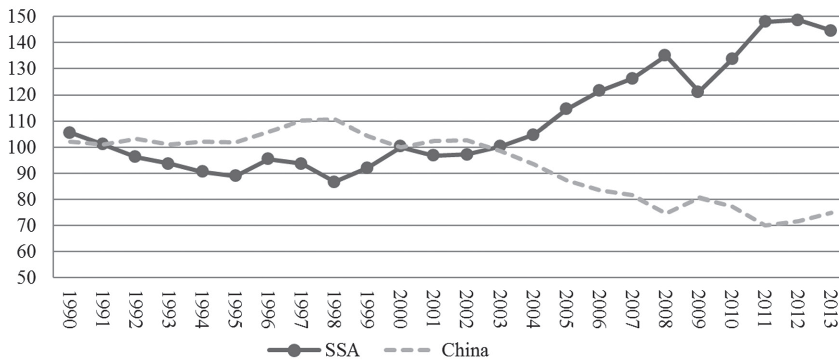

Figure 4 Terms of Trade Index Sub-Saharan Africa and China 1990–2013 (2000 = 100)

Sources: International Monetary Fund's World Economic Outlook (for SSA) and World Bank's World Development Indicators (for China).

Note: SSA = sub-Saharan Africa.

Chinese concessional and non-concessional finance but also include contracts obtained by bidding on projects financed by international organizations and local governments (China Statistical Yearbook 2009). Institutions such as the China Development Bank, ExIm Bank or the China–Africa Development Fund provide development finance for some of these projects. While not all of these financial flows qualify as Official Development Assistance (ODA; Brautigam 2011), they usually involve Chinese firms carrying out projects in the beneficiary countries.

COPs should not be conflated with "investment" (as often done, especially in news media). Investments involve the acquisition of assets in the interest of generating a future stream of profits. By contrast, COPs are merely market outlets of Chinese construction firms overseas, that is, technically service exports.

It should be emphasized that, in terms of magnitude, COPs are far more important than Chinese firms operating through FDI (see Figure 5), with US$3.1 billion in FDI flows standing against a face value of US$40.6 billion of COPs in 2013.

Macro-level effects on manufacturing sector development related to Chinese firms are therefore more likely to come through COPs than FDI. Other than addressing the well-documented infrastructure gap in SSA (see, for instance, Foster et al. 2009), contributing to the enabling environment for industrial development, COPs create a market for building materials. For instance, by 2014, Angola and Ethiopia—the first and third largest market for COPs in 2013 (calculations based on China Statistical Yearbook)—emerged as the third and fourth largest producer of cement in SSA after Nigeria and South Africa (calculations based on the Global Cement Report Database).

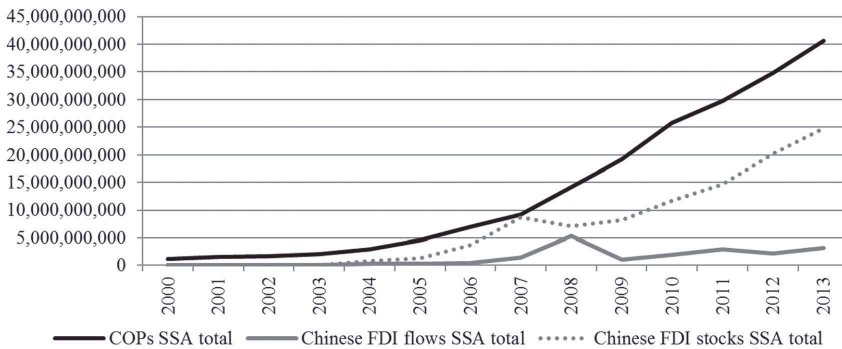

Figure 5 Chinese FDI (Stocks and Flows) Compared with Chinese Overseas Contracted Projects SSA Aggregate (2000–2013, Current US Dollar)

Sources: China Statistical Yearbook (various years) and Statistical Bulletin of China's Outward FDI.

Note: COPs = Chinese overseas contracted projects; SSA = sub-Saharan Africa; FDI = Foreign Direct Investment.

Furthermore, employment generation and a broad income distribution play an important role in kicking off a process of mass production for the domestic market. Chinese engagement with SSA, in particular through overseas contracted projects, may be conducive to this kind of demand generation, especially as, in some countries, COPs make up for a large part of GDP—for example, up to 12% in Liberia (Figure 6).

Importantly, overseas project do have local labor content: Corkin's survey data from 32 Chinese companies in the construction sector reveal that 51% of the labor content is sourced locally (Corkin 2011). Tang (2010) estimates the share of Angolan labor in Chinese companies at 60%, on average, with variations across sectors.

Overall, this suggests that, over and beyond their potential positive effect on the supply side, Chinese contracted projects could play a role in generating employment in SSA countries, thereby contributing to domestic market formation and creating the potential for positive demand feedback loops. But again, there is a role for government policy to play to facilitate appropriate vocational training and skill formation.

The Unevenness of China-Related Effects

China's expansion into SSA supports the double objective of (1) securing access to oil and other mining resources to sustain China's own production, and (2) providing outlets for China's own industries (notably construction), that is, a form of expanding markets for China's own capitalist enterprises (Brautigam 2010).

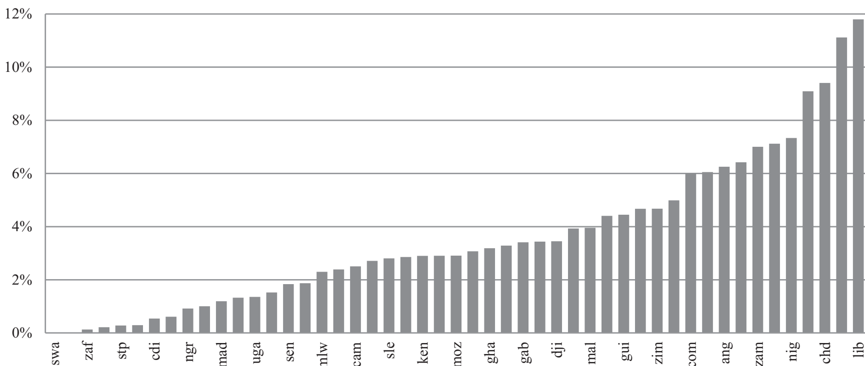

Figure 6 Chinese Overseas Contracted Projects Relative to GDP (Average 2011–13)

Source: China Statistical Yearbook.

Not all countries have the same patterns of interaction with China. Direct and indirect effects of China's presence in the world economy are inherently linked to SSA countries' own production structures, which determine, for instance, the degree to which a country competes directly with Chinese products or benefits/suffers from changes of relative prices on world markets.

We would therefore expect that the effects on industrial development linked to China differ in both composition and magnitude. To separate, analytically, variations in manufacturing sector growth linked to China from country-specific effects linked, for instance, to the political settlement in a given country, we need to first identify countries that face similar China effects. To do so, this section will use cluster analysis techniques to identify groups of countries with similar patterns of interactions with China and map differences of Chinese influence across SSA countries.

Cluster Analysis of China Effects

Cluster analysis allows finding groups in data that have a maximum degree of similarity within each group and significant differences across different groups. In what follows, the *k*-means partition method is used to rank countries as low, medium and high for the 3-year average (2009–11) of the following variables, which have been identified as (potentially) correlated to changes in the manufacturing output in the previous section. Countries with similar rankings on each of the four variables are then grouped into clusters of countries with distinct patterns of interaction with China.

1. *Chinese Contracted Projects as Share of GDP*: Chinese contracted projects can affect manufacturing output due to supply-side effects (infrastructure development and knowledge/skill transfer) and demand-side effects (employment and income generation, demand for building materials). Data on COPs are obtained from the China Statistical Yearbook. For comparability, they were scaled by the recipient country's GDP. On average, COPs account for 1.5% of GDP in the sample countries. There is an increasing trend in all sample countries, reflecting China's increasing engagement in Africa, but COPs are nevertheless strongly concentrated in a number of countries. In 2010, 8 countries (Chad, Niger, Equatorial Guinea, Botswana, Congo-Brazzaville, Angola and Mauritania) had a COP share of more than 5% of GDP, whereas 12 countries had a COP share of less than 1% in 2010. The highest 3-year average COP share of GDP is 5.58%, while the lowest is only 0.008%.
2. *Exports to China as % of GDP*: to capture possible effects of China's economic rise on the external demand constraint of SSA countries. Data on exports to China are obtained from the UN Comtrade database (Broad

Economic Category (BEC), Standard International Trade Classification (SITC), revision 2). On average, exports to China make up for 2.7% of GDP in the sample. The highest value is 25.5% in Congo-Brazzaville, the lowest value in average is 0.00014% in Cape Verde.

3. *Consumer Goods Imports from China as Share of GDP*: to capture possible displacement effects on the domestic markets. Data on consumer goods imports from China is taken from UN Comtrade database (BEC, SITC, revision 2).
4. *TOT—Terms of Trade*: This accounts for the effect of relative price changes on world markets. Data are extracted from the World Bank's World Development Indicators database. Terms of trade is an index of export prices over import prices. For each country, the index value is set to 100 for the year 2000 (i.e., the beginning of the sample period). The highest improvement in the terms of trade can be found in Angola (155), the lowest average value in Togo (34).

After ranking all countries as low, medium and high on each of these four categories, it becomes possible to identify five groups and four sub-groups of SSA countries with distinctly different potential China effects (see Appendix for details):

Group A: Low Impact Group

In this group, direct economic interactions with China are minor. At the same time, consumer goods imports from China also make up only for a small part of GDP. Countries in group A1 have negative or mildly positive terms of trade improvements, while A2 countries had strong improvements. In group A1, changes in the manufacturing performance are least likely to be related to China's direct or indirect influence.

Group B: Negative Impact Group

This group includes countries with low Chinese export demand, low Chinese project presence but high imports of Chinese consumer goods relative to GDP. These countries are more likely to suffer from displacement effects on their home markets while not benefiting from other interactions with China.

Group C: Medium Project Group

This group includes countries with low Chinese consumer goods imports and medium shares of COPs to GDP. Two sub-groups are formed depending on whether they have low (C1) or medium Chinese export demand (C2).

Group D: High Project Group

A fourth group includes all countries with low Chinese consumer goods imports, high shares of COP but low Chinese export demand. In groups C and D, we would expect moderately positive China effects.

Group E: High Impact Group

Finally, group 5 ranks high in both Chinese export demand and Chinese projects but low in Chinese consumer goods imports relative to GDP. In this group, we would expect the strongest positive China impact.

Manufacturing Output per Head in SSA Countries

We can now analyze changes in the manufacturing sector growth over the past decade for countries within these clusters and the group averages across clusters. Growth rates have been calculated as %-increase of manufacturing output per capita in 2011 relative to a 1996–2000 average (to account for any outlier years at the beginning of the period).

All data on real manufacturing value added and population were extracted from the UN National Accounts Main Aggregates database. The highest average manufacturing output per capita in the sample in 2011 is US$965.88 (Swaziland), the lowest is US$6.31 (Democratic Republic of Congo (DRC)). Overall, most SSA countries have experienced little industrialization: In 2011, 28 SSA countries were among the 20% least industrialized countries. Only, a handful of countries fell into the third (Gabon, Namibia, Botswana) or even fourth quintile (Swaziland, Seychelles and Mauritius) globally. Fifteen SSA countries in the sample experienced a decrease in their manufacturing output between 2000 and 2011, while 11 countries observed an increase of more than 70% relative to their 1996–2000 average (see Figure 7).

Table 1 presents the summary of the results of the cluster analysis across groups. It shows that, on average, countries with high shares of Chinese export demand *and* strong Chinese project presence experienced the strongest growth in manufacturing output per capita (on average, 129% relative to the 1996–2000 average). They are followed by the group of countries with little exports to China, but many Chinese construction projects. In this group, manufacturing output per capita has increased on average by 53% over the past 10 years. These two groups perform better than both the low impact and medium project groups. The group of countries which performs worst is indeed the group where Chinese consumer goods imports make up for a large share of GDP.

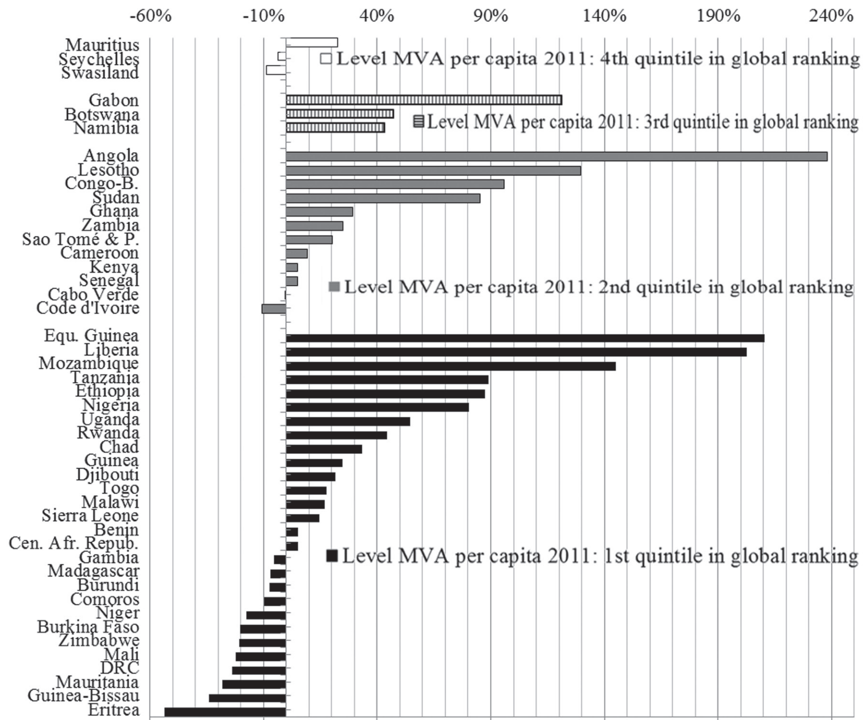

Figure 7 Manufacturing Value Added Per Capita in SSA Countries, Percentage Increase 2011 Relative to 1996–2000 Average, Grouped according to Global Rank in 2011

Source: UN National Accounts.

Note: MVA = manufacturing value added; DRC = Democratic Republic of Congo; SSA = sub-Saharan Africa.

Table 1 Summary Statistics

Group	*Group mean*	*Group median*	*Minimum*	*Maximum*
A. Low impact group	22.66	11.79	–20.49	121.12
A1. Little effects and no/low terms of trade (ToT) improvement	11.47	9.06	–20.49	54.48
A2. Little effects and strong ToT improvement	63.69	80.51	–10.57	121.12
B. Negative effect group	9.79	11.39	–5.32	21.68
C. Medium projects	25.79	13.96	–53.57	145.23
C1. Medium projects and low exports	25.20	5.18	–53.57	145.23
C2. Medium projects and medium exports	28.76	24.83	–24	85.46
D. High projects and low exports	53.14	40.25	–34.06	202.65
E. High projects and high exports	129.07	153.27	–28.32	238.05

It is, however, worth noting that there is a considerable variation *within* groups of countries with similar China-related effects. For instance, the group average of Group D (high projects, low export demand) is largely driven by a 202% increase in manufacturing output per head in Liberia and an 87.4% increase in Ethiopia. In the medium impact group C, Lesotho, Mozambique and Tanzania perform considerably better than the other countries (see Appendix). In the high impact group E Angola is performing relatively better than Congo-Brazzaville despite a similar interaction with China (see details in Table 2). Both Angola and Congo-Brazzaville start from a similar level of manufacturing output per head, both in the second quintile globally but, at these levels, the difference between a doubling and trebling of output cannot be put down to small variations in the denominator (manufacturing output per head increasing from US$50 to US$154 in Angola and from US$42 to US$88 in Congo-Brazzaville between 2000 and 2011).

China-Related Effects and Their Combination with Pre-existing Social Settings and Power Structures in Angola

Stylized Patterns of Manufacturing Output Growth and Government Support for the Manufacturing Sector in Angola

The findings in the previous section support the existence of China-related effects on manufacturing growth in SSA, which vary considerably depending on each SSA country's production structure. At the same time, a large within-cluster variation suggests that domestic factors play an important role in moderating any impact from the world economy. The following section will look at the Angolan case in further detail. It is of particular interest because Angola falls into the group of countries with strong China-related effects and has seen manufacturing output

Table 2 Group E. High Impact Group

Country	*Degree indus.*	*Δmanf*	*COP % GDP*	*X % GDP*	M_{cons} *% GDP*	*Cluster COP*	*Cluster XCHN*	*Cluster MCGDP*	*Group*
Mauritania	1	–28.32	4.9	29.96	5.44	3	3	1	E
Equatorial Guinea	1	210.48	10.96	10.04	0.62	2	3	1	E
Congo-Brazzaville	2	96.07	9.02	28.96	2.15	3	3	1	E
Angola	2	238.05	5.55	24.56	1.53	3	3	1	E

Note: Degree Indus. = degree of industrialization (quintile in global ranking); Δmanf = growth of manufacturing value added per capita (% increase relative to avr. 1996–2000); COP% GDP = Chinese overseas contracted projects as share of GDP (3 year average 2009–2011); X% GDP = Exports to China as share of GDP (3 year average 2009–2011); M_{cons} % GDP = Consumer goods imports from China as share of GDP (3 year average 2009–2011); Cluster COP = cluster Chinese overseas contracted projects; Cluster XCHN = cluster exports to China; Cluster MCGDP = cluster consumer goods imports from China.

per capita grow at faster rates than countries within its cluster, even those with a similar degree of industrialization at the outset (i.e., Congo-Brazzaville). In what follows, it will be argued that economic ties with China have played a crucial role in the Angolan diversification process. Yet external influences need to be analyzed in conjunction with domestic power and class relations. In doing so, of course, the crucial point of reference is that, in 2002, Angola comes out of 27 years of civil war. With major political opponents eliminated, the ruling elites around President Dos Santos are looking for new ways to consolidate their political and economic domination.

Crucially, over the period 2002–12, average annual growth rates of the manufacturing sector are much higher than those of the mining sector (14% against 9%) (Table 3). This seems surprising as Angola is a resource-rich country whose exports are almost exclusively made up of raw materials. The nascent diversification of the economy is thus not picked up easily.

The two main manufacturing sectors in Angola are building materials and beverages, which are reflected, for instance, in the four-digit breakdown of investment projects registered with the former National Investment Promotion Agency (ANIP).[5] Most investments were registered in the production of intermediate inputs, and these were mainly undertaken by Angolan firms. The next biggest subsector is food and beverage production where investors mainly come from high-income countries (Table 4).

Economic diversification became the focus of Angolan policy in the mid-2000s, and manufacturing sector investment has been supported by various policy measures. The broad strategic orientation and the institutional and legal framework (part of which are still in the making) for this are outlined in the Medium-Term Industrial Restructuring Plan (Ministério da Indústria [MIND] 2007). Follow-up priorities and objectives (e.g., target levels of output and employment until 2017) are set out in the National Development Plan covering the period 2013–17 (Ministério do Planeamento e do Desenvolvimento Territorial 2012).

MIND (2007) defines priority areas for manufacturing production in Angola, focusing on products, which have the potential to create linkages between

Table 3 Angola—Average Annual Real GDP Growth Rates by Sector (2005 Constant US Dollar)

Period	*Agriculture*	*Manufacturing*	*Construction*	*Non-oil*	*Mining*	*Services*	*GDP*
1970–75	2.38%	2.35%	2.36%	2.37%	2.44%	2.36%	2.38%
1975–91	–0.51%	–3.47%	–3.60%	–1.84%	3.31%	0.19%	0.84%
1991–2002	–1.05%	0.98%	3.54%	0.29%	3.39%	–0.64%	1.59%
2002–12	11.72%	14.01%	16.97%	13.67%	8.75%	10.97%	10.07%

Source: UN National Accounts Main Aggregates Database.

Table 4 Manufacturing Sector Investments 2011 and 2012 by Broad Category (Constant 2005 US Dollar, Thousands)

Broad category	*Angola*	*High-income countries (excl. port.)*	*Portugal*	*China*	*Tax havens*	*Low-/middle-/ upper-middle-income countries*	*Total*
Food + beverages	34,201	157,442	3,230	259	2,573	2,814	200,520
Intermediate inputs	612,318	897	5,889	551	2,913	9,369	631,937
Machinery	29,481	2,225	173	5,766	0	0	37,644
Final consumption	3,963	144	288	3,270	17,551	0	25,217
Medical equipment	0	2,452	0	0	0	0	2,452
Recycling	0	0	0	0	2,305	2,205	4,509
Total	679,963	163,160	9,580	9,846	25,342	14,387	902,279

Source: Author's calculations based on Agência Nacional para o Investimento Privado.

different sectors,[6] potential for mass consumption, increasing returns to scale, and the potential to generate export earnings.[7] Importantly, MIND emphasizes that a better income distribution is a pre-requisite for domestic market expansion.[8]

Incentives for investment in these priority areas are operationalized through tax incentives and the tariff structure. The new private investment law (Law No. 14/15 of August 11, 2015, replacing Law No. 20/11 of May 20, 2011) grants tax benefits on industrial, property transfer and investment income tax of 5%–100% for a period of 1 to 10 years, depending on the following criteria: location of investment (higher outside of Luanda, the provincial capitals of Benguela, Huíla and the municipality of Lobito), value of investment, Angolan shareholding, local value added, amount of job creation, degree of export activities and type of activity (all economic activities are eligible, but investments in agriculture and agro-processing qualify for additional incentives). The tariff schedule, updated in 2014, raised import duties on items that Angolan companies already produce, for example, 50% import duty on various beverages (Office of the United States Trade Representative 2014).

There are also measures to improve access to credit, for instance through the Angolan Development Bank (Banco de Desenvolvimento de Angola) and the Bank for Savings and Credit (Banco de Poupança e Crédito), which provides finance for micro, small and medium enterprises (MIND 2007).

The Angolan Political Economy—Modes of Accumulation beyond Resource Rent Capture as a Strategy to Establish Hegemony after the End of the Civil War

The fact that the Angolan political class attempts to promote productive activities beyond the mining sector marks a, very recent, profound change in political economy dynamics away from accumulation of wealth through the mere capture of resource rents towards an indigenous system of capitalist accumulation through other productive activities (Ovadia 2016). For the most part of the post-independence period, the economy was dominated by the mining sector with agricultural and industrial production being practically non-existent. In fact, the literature sees Angola as "successful failed state" (Soares de Oliveira 2007a, 609), "the world's richest poor country [. . .] which redistributes wealth upward and outward" (Power 2012, 1010) and—most importantly—in which the ruling elites have little incentive "to spread growth beyond the capital-intensive oil sector [. . .] and to allow a genuine private sector to develop" (Kibble 2006, 540).

Post-independence in 1975, the Angolan economy collapsed due to a combination of factors that include the exodus of Portuguese settlers, unfavorable commodity price movements over the course of the 1980s and the ongoing civil war that lasted from 1975 to 2002 (Bhagavan 1980). Only the oil sector, which had been dominated by non-Portuguese large-scale capital, survives economic collapse and flourishes as major foreign produces (Gulf Oil Company, Petrofina and Texaco) continue to do business in Angola, given the strategic importance of oil (Soares de Oliveira 2007b).

Attempts to re-establish domestic capacity in the former Portuguese-dominated non-oil sector at first failed[9] and were later abandoned altogether (Bhagavan 1985). The fall in crude oil prices in the 1980s made it then increasingly difficult to revive production through government investment with the remaining oil receipts having to serve an ever-growing volume of foreign debt as well as the defence budget (Kyle 2005).

With an increasingly weak material base, distributional conflicts intensified, and rents generated by the oil sector primarily became a means to consolidate power around the MPLA (Movimento Popular de Libertação de Angola) presidency. Facing the accelerated economic decline, intensification of the civil war and the loss of global power by its usual allies, the MPLA consolidated its power by prioritizing the interests of the *nomenklatura* over those of the masses. In particular, criminal prosecution of illicit activities on the black market is relaxed, while all mechanisms of political and civic participation are subjected to strict control. This way, a patronage circle, which accumulates wealth outside the law while being shielded against independent competitors and popular discontent,

forms around the presidency (Messiant 2008, 318ff). As a result, "Angola's political economy [was] deeply enmeshed with external circuits and actors" (Sogge 2009), and the ruling elite used ties to the global oil industry and Western (US) military ties with Western (US) forces to maintain their domestic power, instead of building domestic legitimacy.

Patronage networks around the presidency ensured the "expanded reproduction of autocratic rule" (Sogge 2009), by means of maintaining "[. . .] corruption, the economic model based on natural resources and a strict control of [. . .] political and civic participation" (Ferreira 2005, 520). Within this setting, the ruling elites had little incentive to move beyond rent seeking as "alternative sources of income cannot compete with oil rents and are in fact largely dependent on them" (Soares de Oliveira 2007b).

Since the turn of the century, two elements changed this situation. Firstly, the chronic balance of payment problems that made accumulation outside the oil sector unprofitable in the post-independence period resolved with the recovery of oil prices and China's increased demand for Angolan oil. Bagnai, Rieber, and Tran (2012) estimate that Angola's potential growth rate, that is, the one consistent with its balance of payments, has increased from 3.7% in the 1990s to 12.4% in the 2000s (Bagnai, Rieber, and Tran 2012). This is the highest increase in their sample of SSA countries. Forty-seven per cent of this increase can be explained by the growth in demand from and Angola's market shares in developing Asia, primarily China (Bagnai, Rieber, and Tran 2012). This increase in export earnings allows for higher volumes of imports of capital goods, contributes to the formation of a consumer demand base and sustains high volumes of government spending on infrastructure, which, in turn, creates a market for building materials (see below).

Secondly, since the end of the civil war in 2002, attempts to consolidate the power position of the presidency also focus on making allies and enlarge their basis of support among former opponents. This becomes apparent when the state is understood not as a source of power relations but as an arena in which different social groups compete for influence. Hegemony is maintained not only through coercion and exclusion but also through building consent through both material and non-material means. The end of the civil war (and the elimination of UNITA [União Nacional para a Independência Total de Angola] military resistance to MPLA hegemony) might have led the MPLA elite to shift strategies from the use of coercion (in this case, armed conflict) to building consent through the civil society and otherwise (Solli and Leysens 2011).

Coercion, of course, has not disappeared. Indeed, Sogge (2009) notes that "the state's monopoly of coercive power is today virtually complete, having marginalized putative separatist movements both militarily and politically," in particular using a well-functioning military and security apparatus and having marginalized

Parliament through a narrow mandate and minimal resource endowments. Just recently, 13 young political activists have been jailed and accused of plotting a coup d'état after reading books on non-violent resistance (Allison 2015).

However, we can also observe various attempts to build consent among the marginalized, that is, outside of the urban elites around the presidency. For instance, more than half of the subsidised credit issued by the National Development Bank (BDA) within its first year of operation were going to the Cabinda province, which claims independence (Sogge 2009). Likewise, in view of the 2008–09 presidential and parliamentary elections, the MPLA government has intensified its efforts to improve basic public services such as access to drinking water, electricity, waste disposal, health and education (Le Billon, Vines, and Malaquias 2008). Furthermore, the government has engaged in territorial reforms/a decentralization process, granting some discretionary power to provincial deputies. Following negotiations with UNITA, the MPLA also considers to make the choice of the provincial governor dependent on electoral outcomes (Sogge 2009). In a similar vein, Ruigrok (2010) observes that regional elite associations in the Huíla province, which were formed as a consequence of the growing discontent about social and political exclusion in the periphery, have gained increasing political significance representing local interests both at the national and at the local level. Finally, to build consent horizontally, more than 5,000 former UNITA soldiers and generals were integrated into the party, military structures and the police force (Sogge 2009). All of the above examples show that the government does engage in efforts to accommodate discontent as means to consolidate their hegemony.

In fact, the manufacturing sector development program sits very well with this logic. The creation of new profitable business opportunities has allowed the building of a growing circle of allegiance around the president (Soares de Oliveira, Verhoeven, and Jones 2013). At the same time, all new business opportunities are tightly controlled by concentric circles of power around the presidency (Ovadia 2016), which makes material success entirely dependent on support for the political regime. For example, approvals of and incentives for investments in excess of US$10 million are decided by the "Technical Unit for Private Investment," which operates directly under the office of the president.[10]

The Formation of a Market for Building Materials on the Back of Chinese Construction Projects

Angolan manufacturing activities arise as a result of domestic market formation (i.e., increase in domestic demand), which, in turn, reflects the combination of global economic forces and the specific post-civil war domestic setting. The building materials sector emerges on the back of Chinese-financed infrastructure projects. The mechanism runs from increasing export earnings as a result

of changes in global demand and price structures to higher government spending on infrastructure, which is by itself an attempt to build consent around MPLA hegemony by demonstrating the government's ability to deliver basic infrastructure. This then creates a market for building materials, that is, a range of new profitable business opportunities, which are captured by the elites themselves.

Angola is the largest recipient of loans from China, receiving a total of US$21.2 billion over the period 2000–2014, that is, 23% of total Chinese lending to Africa[11] (Hwang, Brautigam, and Eom 2016).[12] These loans have triggered a construction boom in Angola, which is dominated by Chinese construction through COPs. Angola is the country awarding the largest absolute amount of construction contracts to Chinese firms in Africa, with a total of US$7.4 billion of construction contracts being completed and 292 construction contracts worth US$4.03 billion being signed in 2013 alone (China International Contractors Association [CICA] 2014). COPs make up for 6.1% of GDP in 2013 (calculations based on UN National Accounts and China Statistical Yearbook).

This provides critical infrastructure for production, for instance in terms of access to electricity and road infrastructure,[13] but more fundamentally, it also induces demand for the production of building materials.

The case of cement production is illustrative for this pattern of linkage formation from the construction sector and elite capture of profitable business opportunities. From the mid- to late-2000s, cement consumption in Angola outstripped domestic production by large margins, with Angolan cement imports increasing at an average annual rate of 56%[14] between 2002 and 2009, 52%-77% of which were sourced from China (calculations based on UN Comtrade).

Yet Angola gradually developed a cement supply base causing both imports[15] and prices of cement to fall.[16] By 2014, Angola was the fourth largest producer of cement in SSA after South Africa, Nigeria and Ethiopia. Ownership structures mirror the political economy dynamics underlying the diversification process opportunities with investments being controlled by circles close to the president's family and political allies. The largest producer is CIF Luanda, a joint venture between the Angolan capital and the China International Fund. The remaining plants are by now all in local hands[17] and include the companies listed in Table 5.

Isabel dos Santos owns shares of the investment fund Ciminvest, which holds 49% of Nova Cimangola, while her husband sits on the company's board. The state itself owns 40.2% of Nova Cimangola (Africa Confidential 2009). A former chairman of the board of Sonangol and minister of industry, Joaquim David, is an investor in FCKS (Marques de Morais 2015).

Table 5 Angolan Cement Production Base in 2014

Company	*Capacity (million tons per annum)*	*No. of plants*
CIF Luanda	3.60	1
Nova Cimangola	1.80	1
Fabrica de Cimento do Kwuanza Sul	1.46	1
Cimenfort industrial Lda (Genea Angola)	1.40	1
Secil Lobito	0.35	1

Source: Global Cement Report 11th edition.

The Beverage Sector: An Emerging Consumer Demand Base

Increasing beverage production comes out of the formation of a domestic consumer demand base. Increased per capita wealth (or the expectation of a rise in purchasing power) as a result of increased oil revenues attracts European and South African multinationals, which dominate the Angolan market alongside some domestic producers, such as the Angolan market leader in soft drinks Refriango (Jover, Pintos, and Marchand 2012).

The largest beer manufacturing plants in Angola are owned by BGI (the beer branch of the French Castel group). With production lines in seven factories and 4,000 employees as of 2012 (Jover, Pintos, and Marchand 2012), the French group maintains close ties with the political elites through the MPLA's financial investment company GEFI,[18] who is a minority shareholder in the Cuca Brewery (Marques de Morais 2012). Angola's first Prime Minister Lopo do Nascimento still holds 35% stakes in the Castel controlled glass bottle maker Vidrul (Eaglestone Securities 2014).

At the height of the commodity price boom, more multinationals enter the market or expand their production lines, including SAB Miller, the Portuguese Unicer (Allix 2013) and most recently the CIF-financed Lowenda Brewery which produced about 10% of domestic beer output in 2013 (MIND 2014). This even incentivized backwardly linked industries like the South African tin can producer Nampak Bevcan to set up production in Angola (Allix 2013).

Foreign capital is attracted by the anticipation of a growing domestic consumer demand base. For instance, Diageo (producer of brands such as Guinness and Johnnie Walker) considers Angola a key new market, with Angolan beer consumption per head being two-thirds of UK levels, thereby making it the largest African market for beer and the third largest African market for alcohol (Diageo 2013).

If beverage multinationals consider Angola an important emerging market, the relocation of production follows because of high import tariffs set by the government, which makes localized production more profitable than exporting. According to Distell's CEO, for instance, exports to Angola are less profitable relative to

setting up production there after the sharp rise in import tariffs in 2014. "An import model—paying excise and transport costs—can never be as effective or efficient from a pricing standpoint than a locally owned production and route-to-market business" (R. Rushton, CEO of Distell, quoted in Maritz 2014).

End of the Commodity Price Boom and Its Implications for Manufacturing in Angola

The extent to which the emergence of the manufacturing activities in Angola was favored by the rise in mainly Chinese export demand becomes clear in light of the recent drop in oil prices, which leads to reductions in government spending on infrastructure and strains domestic purchasing power, given the reductions in fuel subsidies and inflationary pressures due to the weak Kwanza. The Angolan government has cut the 2016 budget by 20% (Patrick 2016), which has noticeable effects on building materials production already. A Lebanese construction materials producer, for instance, said to branch out of building materials into juice production, given the shrinking demand for building materials (McClelland 2014). Beverage producers are also reducing production and laying off workers in light of shrinking consumer demand. The Castel Group, for instance, laid off 700 workers early in 2016 and is operating at three instead of five production lines, while Distell is not going ahead on planned expansions of production (*Business France* 2016a, 2016b).

Whether government efforts to support manufacturing production are sustainable in face of the recent unfavorable commodity price movements is one question. Whether such efforts are to be welcomed in the first place is another. Despite the efforts to build consent, dissident views are systematically suppressed by the MPLA government (see Soares de Oliveira 2013; Soares de Oliveira 2011). At the same time, despite employment generation, the biggest benefits from the lucrative government incentives still occur to those well connected to the regime (see case studies provided by Ovadia 2013). Given this, Soares de Oliveira, Verhoeven, and Jones (2013) have coined the term "illiberal peace-building," and Ovadia (2013) raises the question whether capitalism emerging in Angola might turn out to be more akin to fascism, that is, capitalism without freedom and democracy.

While this underlines the lack of many desirable development outcomes, it should be emphasized that freedom and democracy have material foundations which sustain them. Political power stems and cannot be separated from social power inherent in the relations of production. In the Angolan case, these relations mainly oppose subsistence activities to rentier activities—with political power relationships heavily in favor of the rentier class. Against this background, the nascent transformation towards "nurture capitalism" described in this article is of interest and may be a source of societal change itself. If sustained, the development of an Angolan manufacturing industry might produce new agents of change,

outside of the current subsistence and rentier classes. Indeed, historically, it was only the existence and growing power of the working class, which led to its political enfranchisement (through extension of the vote) and the resulting material gains such as the emergence of the welfare state (see Chang 2011).

Going forward, therefore, the question is therefore how to promote and strengthen the social forces working in favor of a more inclusive society (e.g., by strengthening and supporting labor movements). Policies that foster domestic employment and demand generation might not only support successful industrialization in a global economic environment marked by China's growing importance but, in doing so, also create more impetus for a wider social change.

Conclusions

Industrialization is a complex socio-economic process, which unfolds through the interplay of various external and domestic factors. China's growing engagement with SSA economies is one such external factor. Given the complexity and diversity of China–SSA interactions, we cannot expect to find a simple relationship between China's growing presence in Africa/world markets and manufacturing output growth in African economies.

China affects industrialization processes in SSA through a multitude of channels—some favoring unevenness, some counteracting it. On the supply side, the operation of Chinese firms can have a positive impact resulting from productivity enhancing technology and skill transfer. Chinese firms have not (systematically) engaged in a scramble over African labor or mineral resources but have, in fact, been shown to be predominately market seeking or long-term oriented with positive implications for technology transfer and skill development. In addition, Chinese infrastructure construction projects improve the enabling environment. On the demand side, the picture is somewhat more mixed: On the one hand, Chinese competition on world and domestic markets can spell trouble for SSA producers of manufactured products, while Chinese demand for SSA raw materials can relax the external demand constraint. Crucially, however, COPs also create a market for building materials and provide an important source of domestic employment, and therefore relax the domestic-demand constraint on manufacturing growth.

The third section has demonstrated that the China-related effects differ in size and composition across different SSA countries. While differences in manufacturing sector performance are observable across groups with different China-related effects, we also observe that countries with more or less similar and indeed very large China effects have very different outcomes. For instance, countries with a high Chinese export demand and a high Chinese project presence have had, on

average, the highest manufacturing output growth over the last decade. However, within this group, Angola performed much better, from a similar starting point in terms of manufacturing per head, than, for example, Congo-Brazzaville, despite the fact that Chinese projects accounted for about 5% of Angolan GDP compared to 10% in Congo-Brazzaville.

This serves to illustrate that global economic trends cannot be analyzed in isolation of domestic dynamics, in particular policy making and societal power relations. These are very context specific, and therefore the policies and state/power relations that allow countries to benefit from Chinese engagement are not easily generalizable. In the case of Angola, we have seen how the government pursues an industrialization strategy drawing on both export demand and production for the domestic market. Beyond its economic significance, it stands to reason that the government uses local manufacturing development and employment generation as tools to "manufacture consent." While "developmental" economically, economic diversification does not go together with an extension of democratic rights, accountability or transparency—dissident views, in fact, being relentlessly suppressed by the MPLA government. Over and beyond its significance within the China–Africa debates, the Angolan case therefore illustrates that early forms of capitalist accumulation that counteract unevenness at the global scale can emerge without a range of equally important developmental outcomes and consequently calls for further reflection on "what is the developmental state" and which forces sustain developmental outcomes beyond the economically desirable.

Appendix

Cluster Analysis—Detailed Results

Group A: Low Impact Group

Country	*Degree indus*	*Δmanf*	*COP % GDP*	*X % GDP*	M_{cons} *% GDP*	*Clusters COP*	*Cluster XCHN*	*Cluster MCGDP*	*Group*
Burkia Faso	1	–20.49	0.02	1.17	0.22	1	1	1	A1
Burundi	1	–7.3	0.6	0.08	0.52	1	1	1	A1
Sierra Leone	1	14.52	1.26	0.36	2.39	1	1	1	A1
Malawi	1	17.08	1.12	0.1	1.12	1	1	1	A1
Uganda	1	54.48	0.98	0.13	1.37	1	1	1	A1
Cape Verde	2	–0.41	0.69	0	1.67	1	1	1	A1

(Continued)

(Continued)

Country	*Degree indus*	*Δmanf*	*COP % GDP*	*X % GDP*	M_{cons} % *GDP*	*Clusters COP*	*Cluster XCHN*	*Cluster MCGDP*	*Group*
Senegal	2	4.77	1.26	0.25	1.78	1	1	1	A1
Cameroon	2	9.06	0.45	1.9	1.33	1	1	1	A1
São Tomé and Príncipe	2	20.07	0.32	0.01	1.13	1	1	1	A1
Namibia	3	43.19	1.14	3.59	3.69	1	1	1	A1
Swaziland	4	−8.82	0.06	0.31	0.09	1	1	1	A1
Nigeria	1	80.51	1.09	0.41	1.44	1	1	1	A2
Côte d’Ivoire	2	−10.57	0.12	0.35	1.14	1	1	1	A2
Gabon	3	121.1	1	6.74	0.48	1	2	1	A2

Group B: Negative Impact Group

Country	*Degree indus.*	*Δmanf*	*COP % GDP*	*X % GDP*	M_{cons} % *GDP*	*Cluster COP*	*Cluster XCHN*	*Cluster MCGDP*	*Group*
Gambia	1	−5.32	0.27	0.86	8.07	1	1	2	B
Benin	1	5.21	0.38	1.67	26.06	1	1	3	B
Togo	1	17.57	1.44	1.36	29.05	1	1	3	B
Djibouti	1	21.68	3.57	0.08	23.28	2	1	3	B

Group C: Medium Projects Group

Country	*Degree indus.*	*Δmanf*	*COP % GDP*	*X % GDP*	M_{cons} % *GDP*	*Cluster COP*	*Cluster XCHN*	*Cluster MCGDP*	*Group*
Eritrea	1	−53.57	2.2	0.08	0.66	2	1	1	C1
Mali	1	−22.2	3	0.63	0.94	2	1	1	C1
Zimbabwe	1	−20.86	1.95	1.01	1.03	2	1	1	C1
Comoros	1	−9.87	2.2	0.00	0.71	2	1	1	C1
Madagascar	1	−6.91	1.82	0.81	2.75	2	1	1	C1
Central African Republic	1	5.18	1.6	1.03	0.39	2	1	1	C1
Guinea	1	24.88	1.73	0.55	5.28	2	1	1	C1

Rwanda	1	44.4	1.69	0.6	0.38	2	1	1	C1
Tanzania	1	89.18	2.72	1.08	3.34	2	1	1	C1
Mozambique	1	145.23	2.86	1.76	3.29	2	1	1	C1
Kenya	2	4.91	1.97	0.1	3.62	2	1	1	C1
Ghana	2	29.21	1.87	0.33	4.62	2	1	1	C1
Lesotho	2	129.46	1.99	0.14	1.34	2	1	1	C1
Seychelles	4	−3.8	4.33	0.13	0.95	2	1	1	C1
Mauritius	4	22.74	1.51	0.08	2.15	2	1	1	C1
Democratic Republic of Congo	1	−24	4.26	14.15	2.22	2	2	1	C2
Zambia	2	24.83	2.28	9.61	0.34	2	2	1	C2
Sudan	2	85.46	3.63	9.07	1.84	2	2	1	C2

Group D: High Project Group

Country	*Degree indus*	*Δmanf*	*COP % GDP*	*X % GDP*	M_{cons} *% GDP*	*Cluster COP*	*Cluster XCHN*	*Cluster MCGDP*	*Group*
Guinea-Bissau	1	−34.06	5.16	0.27	0.69	3	1	1	D
Niger	1	−17.63	7.45	0	0.6	3	1	1	D
Chad	1	33.53	8	2.31	0.27	3	1	1	D
Ethiopia	1	87.39	4.62	0.7	0.89	3	1	1	D
Liberia	1	202.65	7.51	1.04	6.63	3	1	1	D
Botswana	3	46.96	6.3	0.76	1.96	3	1	1	D

Group E: High Impact Group

Country	*Degree indus.*	*Δmanf*	*COP % GDP*	*X % GDP*	M_{cons} *% GDP*	*Cluster COP*	*Cluster XCHN*	*Cluster MCGDP*	*Group*
Mauritania	1	−28.32	4.9	29.96	5.44	3	3	1	E
Equatorial Guinea	1	210.48	10.96	10.04	0.62	2	3	1	E
Congo-Brazzaville	2	96.07	9.02	28.96	2.15	3	3	1	E
Angola	2	238.05	5.55	24.56	1.53	3	3	1	E

Notes

1. More broadly, the National Innovation System, that is, the network of public and private institutions that builds human resources, stimulates technological activity, finances technological investment and provides technological infrastructure (Lall and Pietrobelli 2005).
2. Firm-level economies of scale, stemming among other from the division of labor within the manufacturing firm, are at the basis of productivity increases. At the economy level, the bigger the size of the market, the greater the number of inputs produced under increasing returns to scale. Thus, it is not merely the size of the individual firm but the economy's volume of production (i.e., the simultaneous growth of a number of different kinds of undertakings operating each on a large scale) that makes the occurrence of increasing returns at the economy level possible (Young 1928).
3. Following the definition of the International Monetary Fund (IMF), that is, countries whose exports of non-renewable primary commodities account for more than 25% of total export revenues.
4. The maximum potential growth rate is consistent with the balance of payments equilibrium, that is, the growth potential consistent with export earnings (Thirlwall 1986).
5. Data limitations: All investments beyond US$1 million have to be registered with ANIP in order to qualify for the investment incentives provided by the government, though limitations to these data should be kept in mind. ANIP data exclude most oil investments, since these are made under production-sharing agreements. In 2007, ANIP only recorded investments exceeding US$50 million. The categorization of investment flows by country of origin might not fully reflect the increasingly complex ownership structures of multinational companies, while investments undertaken from tax havens, like the British Virgin Islands, the Cayman Islands or Gibraltar, conceal their true origin. Finally, ANIP data are not technically FDI but merely *intended* investment projects.

   Data aggregation: 4-digit ISIC (rev. 3, harmonized 2002) data have been regrouped by the degree of processing and broad economic use of the goods as follows: "Food and Beverages" (1511 to 1600); "Final Consumption Goods" (1721 to 1920 and 2211 to 2230 and 3210 to and 3410 to 3699 + 3330 + 2893 + 2930 +3150); "Intermediate Inputs" (2010 to 2109 + 2310 to 2899 + 3130 + 3420 + 3430 + 3210 + 1533 + 1711 + 1911); "Machinery" (2911 to 3190 + 3313 + 3320 + 2813); "Medical Equipment" (3311 to 3330 + 2423); "Public Transport Equipment" (3530 + 3520 + 3511 + 3599).

   These categories are not always clear-cut. For instance, product code 3150 comprises electric lamps and lighting equipment, which can be used for private consumption and can serve as production equipment in firms. Even passenger cars (code 3410) and motor cycles can serve as essential equipment for firms. However, all of the above have been counted as final consumer products making a judgment about the predominant use of these goods.
6.

   The common interest in national development also takes us to consider the convenience of formulating a strategy, which aims at complementing vertical and horizontal linkages as well as developing sectors which can motivate other industrial activities, so as to ensure sustained development. (MIND 2007: 26; translation by the author)
7.

   These above mentioned products are, at the moment, the group of manufacturing products, which, almost without exception, present cumulatively the following

characteristics: a. Mass- and widespread consumption; b. Existence of national raw materials for their processing; c. Quality of installed and idle capacity, to make the realization of economies of scale possible; d. Strong impact on the country's balance of payments. (MIND 2007: 30; translation by the author)

8.

Taking into consideration, the importance of imports on the balance of payments position, which ultimately constrains the country, it is understood that particular attention should be given to those industrial activities which are labor intensive and make use of natural resources, in view of creating a sustained industrial base, widespread increase of purchasing power, better income distribution and consequent enlargement of the domestic market. (MIND 2007: 26; translation by the author)

9. In July 1979, the "Law on foreign investment" (Law No. 10/79) offered attractive terms to foreign investors providing guarantees against nationalization, allowing the transfer of up to 25% of profits and granting tax exemptions during the first years on capital goods imports and exemptions on custom duties on manufacturing exports, but the law ultimately failed to attract investment outside the oil sector (Bhagavan 1985).
10. Decree 182/15 of September 30, 2015.
11. See Corkin (2013) for more details on the Exim-Bank credit lines.
12. Main lenders include China Exim-Bank (US$7.4 billion) and the China Development Bank (US$11.3 billion). The remainder are commercial rate loans to Sonangol from the China Development Bank and the Industrial and Commercial Bank of China (ICBC).
13. Through the 2004 and 2007 Exim-Bank credit lines, for instance, a total number of 51 schools, 10 hospitals and 9 health centers and around 800 km of highways have been constructed. The electricity network in 7 cities, the water supply system in 9 cities and the telecommunications network in 13 provinces have been restored and expanded (Ministério das Finanças 2008).
14. From US$10.5 million in 2002 to US$193 million in 2010.
15. Cement imports decreased at an average annual rate of –30% between 2010 and 2014 to US$77 million in 2014.
16. Prices of cement in Angola declined following the expansion of domestic production, ex-works prices falling from US$240/t in 2010 to US$150/t in 2014 (Armstrong et al. 2015).
17. Nova Cimangola (formerly owned by Heidelberg Cement), Fabrica de Cimento do Kwanza Sul, Cimenfort Industrial Lda and Secil Lobito. The latter has been constructed and equipped by Sinoma (CICA 2014).
18. In 1992, the MPLA formally established a business conglomerate GEFI (Sociedade de Gestão e Participações Financeiras: Business Management and Participation Company) which has shareholdings in 64 private companies in all sectors of the economy (Marques de Morais 2012).

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THE POLITICS OF MODERNIZATION AND THE MISLEADING APPROACHES TO DEVELOPMENT

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Abstract: This article deconstructs the theory of modernization and argues that the theory is a political propaganda to mislead the people of Third World countries; the social transformation the theory advocates is not for the development of Third World countries. Instead, modernization is actually gradually destroying the local productive capacity, while cultivating the Western individualism in the South. In Uganda, the policies to bring about modernization under economic reform have made the economy to be dominated by a service sector that neither creates ample employment opportunities nor earns foreign exchange for the country. They have undermined manufacturing and agriculture, and as a result, a large percentage of the population is experiencing food insecurity. The article concludes by arguing that Uganda should have learnt from China's self-determined reforms and China should also learn from Uganda's experience while contemplating to adopt further reforms under foreign pressure.

Key words: politics of modernization; misleading notions of development; destruction of local productive capacity; Third World countries; Uganda

Background

Introduction

The modernization theory of development was formulated for Third World countries after the Second World War. Despite the failure of its strategy to bring about social improvements in the lives of the great majority in Third World countries, the theory is still propagated and has been stepped up at the time of globalization. By adopting the modernization strategy of globalization, it is claimed that Uganda,

like other Third World countries, is on the journey to becoming like the First World (Uganda 2013). However, the claimed development process is undermining the welfare of the majority in Uganda: the poor are becoming poorer as reflected by the voices of the affected people (Kakande 2010). If the journey toward the claimed modernization is causing hardships to the majority of people, despite the claim that the economy has been experiencing impressive economic growth rates accompanied by fast poverty falling levels, is the current approach of modernization genuine or is it a political propaganda?

The objective of this article was to deconstruct the theory of modernization and in the process counter its propaganda. The article first elaborates the theoretical method of analysis. Then, it proceeds to deconstruct the theory of modernization by disputing its propaganda. The article then goes further to critically analyze the misleading notions of and approaches to development under modernization strategy. After examining the weaknesses of postmodernism in deconstructing the modernization theory, the article specifically considers the failed modernization project in Uganda and contrasts the country's experience with China's reforms. It concludes by arguing that development, to be genuine, should be self-defined by the people who are concerned with their own welfare.

The Theoretical Method of Analysis

The article builds on the theory of politics, state, and power. From the context of Greek civilization, especially the works of Aristotle, normatively the concept of politics has an attractive meaning. To Aristotle, politics is an activity that promotes the good of the community or securing a good life for an individual in a community (Maddox 1996). However, the theory and practice of politics give a different picture, especially from the time of mercantilist transition to capitalism to date. Politics as is practiced by the West means the use of the state machinery to control and manipulate the majority of people by hook or crook for the capitalists to make money and accumulate unlimited wealth. At the time of mercantilist transition to capitalism, Machiavelli proposed the theory of politics for political leaders to be cunning, manipulative, and even cruel (Heywood [1997] 2002, 7) in order to build a strong national state, so that the merchants of the time could prosper from trade (Sabine and Thorson 1973, 312). The politics of cunningness and manipulation truly corresponds with the system of capitalism; from the history of capitalism, it is normal for hunters of profits to be smart by covering their steps so as to accumulate as much wealth as possible.

Therefore, under capitalistic arrangement, the rich through the power of money uses the state to further their interests. The state is an organ or institution that does not only make binding decisions but also has the monopoly of power to use force in a demarcated territory. The state is more than a government although connected

to the government because its influence goes beyond "the business of those employed within the institutions of the state" (Maddox 1996, 32). Therefore, the state affects individuals in all aspects of life.

To link politics with the state, politics is about the control or influence of the state power to serve the interests of the rich—the multinational corporations under the current world dominated by capitalism. According to Heywood ([1997] 2002, 10–11), power is the ability to achieve a desired outcome, through whatever means. He lists and discusses three faces of power. There is power over decision making. With the power on decision making, the multinational corporations determine or influence the setting of priorities to be worked upon by the state or government. The power can be exercised through the use of force or intimidation, cutting deals, and the creation of obligations, loyalty, and commitment. The power of multinational corporations from the West to influence policy formulation both at home and abroad was also observed by Hill ([1997] 2005) and is concretized with the example of Monsanto by the article of Parker and Ryan on genetically modified organisms (GMOs; see Parker and Ryan 2014).

There is also the power over agenda setting. This is the ability of the powerful forces to prevent policies that cater for the interests of the masses from coming up, while promoting the policies that cater for the interests of the multinational corporations. This can be illustrated by the policies of neoliberalism. While the policies serve the interests of foreign investors to make money freely from the economies of Third World countries, the governments of the affected countries are prevented from practicing the policies of economic nationalism that nurtured the capitalists when Western countries were developing (Chang 2002). While the countries of the West preach free trade abroad, they practice protectionism at home (Watkins and Fowler 2004).

Again, there is power of over thought. Perhaps, this is the most important face of power regarding the subject matter of modernization and social transformation the article is set to deconstruct. To use the words of Heywood already cited on the issue: "This is power expressed as ideological indoctrination or psychological control" (Heywood [1997] 2002, 11). This is done as political propaganda to persuade the people that their interests have been or are being catered for. In addition, ideological indoctrination is done to create false perception on issues concerning development and poverty, so that the exploited and oppressed can never clearly identify the cause of their problems.

Under globalization, the state that was created during colonialism in Uganda, like in other former colonies or semi-colonies, has been recaptured by the World Bank (WB), International Monetary Fund (IMF), and World Trade Organization (WTO), and is currently used to further the interests of multinational corporations. As a result, while the multinationals win, the masses, especially the peasants in Third World countries, lose (Asiimwe 2011).

Modernization and the Political Propaganda of Development

There are a number of works (de Rivero [2001] 2003; Odei Ajei 2007; Matunhu 2011; Asiimwe 2011) that have engaged the modernization theory on development. However, despite their valuable contribution to the debate of development, they do not engage the theory of modernization as a political propaganda. Therefore, to fill the mentioned gap, the article deconstructs the theory of modernization from the angle of being a political propaganda.

The theory of modernization came up after the Second World War when the US emerged as the most powerful Western country. At the time, she was not only preoccupied with stemming the spread of communism from Eastern Europe but also positioning herself as the dominant country in the global economy. As a result, the US developed the modernization theory as an ideology of dominating Third World countries in the name of helping them to come out of underdevelopment through the Western style of industrialization (Odei Ajei 2007; Ake 1981). In the inaugural presidential address of January 20, 1949, the US president then, Harry Truman, is quoted as saying, "We must embark on a bold new program for making the benefits of our industrial progress for the improvement and growth of underdeveloped areas." As if he knew that his country's imperial designs were being detected, he went on to say, "The old imperialism—exploitation for foreign profit has no place in our plans" (Matunhu 2011, 66). From then onward, especially in the 1950s and the 1960s, works on articulating how modernization could be achieved mushroomed culminating in the Rostow's dubious stages of development of 1960 (Odei Ajei 2007).

According to Rostow, whose prescriptions for development are innocently taught in Uganda, all countries of the world will pass through five stages, namely the traditional, the establishment of preconditions for take-off, the take-off itself, the drive toward maturity, and finally the era of mass consumption. Accordingly, at the traditional stage, there is limited technology and the society is static. As the static society experiences external influences, there is a transition toward the preconditions for the take-off stage. Under this next stage, there is the installation of physical infrastructure and the emergence of an elite class. In addition, there is the introduction of commercial exploitation of agriculture and the extractive industry. The new developments lead the economy to the take-off stage. At the take-off stage, investment in manufacturing exceeds 10% of national income; there is modernization of social, political, and economic institutions. Again, these developments lead to the second last stage of the drive toward maturity. Here, there is a wider development of industrial and commercial bases; there is exploitation of comparative advantages in international trade. Consequently, eventually the era of mass consumption enjoyed now by the few in the West is reached.

The Rostow's thinking continues even today, especially at the time of globalization and therefore, according to the development agenda set by the current dominant global forces, there is "a universal evolution in the direction of capitalism" "through economic modernization" (Fukuyama 1992, quoted in Hill [1997] 2005, 45). As a result, the technocrats of the economic modernization present development "as a natural process, like a Darwinian evolutionary certainty" (de Rivero [2001] 2003, 109–10).

The claimed economic modernization is backed by misleading deductive economics but without historical evidence. According to the mentioned economic approach, development is defined as quantitative growth followed by qualitative change or the so-called social transformation. The quantitative change is measured in terms of growth rates to be followed by qualitative socioeconomic changes. It is believed that as economic growth takes place in a country, it trickles down to benefit all the people in a country; it is claimed that economic growth offers opportunity for the people to earn incomes. As a result of the assumed increased incomes to all the people from the economic growth, poverty reduces within a community, and individuals have a freedom of choice of which goods and services to buy (SSID 2006).

Again, it is assumed that as the GDP continues to grow, it results in social transformation in all aspects of life. It is said that as people become rich, they demand for political freedoms and accountability and therefore modern democracy is introduced (Sachs 2005). For that matter, development is seen in comparative terms, the West being the benchmark. Unfortunately, even Rodney ([1973] 1980), the great African revolutionary writer, looks at development in comparative terms.

In line with modernization theory, we have misleading categorization of countries in the world. These include among others First World, Second World, Third World countries; low-income, middle-income, high-income countries; poor countries, emerging economies, and developed economies; nonindustrialized, industrializing, and industrialized countries; and recently the size of the monetary economy is considered to be important (UNDP 2013). However, the lullaby told to the Third World countries that they are on the way to reaching the era of mass consumption promised by Rostow is a "myth," to use de Rivero's phrase already cited because virtually all Third World countries have found it impossible to become like the West. In his words,

> It has not been possible to replicate the developed, capitalistic and democratic nation-state in most of the countries that comprise the so-called developing world. The greater part of humankind continues to exist with low incomes, in poverty, technologically backward and governed by authoritarian regimes or, at best, in low-powered democracies.

> At the end of the twentieth century, the world consisted of aside from the 24 developed countries, of more than 140 non-developed countries and of only 4 developed "newly industrialized countries," (NICs): two city states (Singapore and Hong Kong) and two small countries (South Korea and Taiwan). (de Rivero [2001] 2003, 4)

Regarding the emerging economies, the propaganda that some countries are taking off is not new. Again de Rivero ([2001] 2003, 112) observed,

> Since the 1960s, we have witnessed many "take-offs," but few cases of national development. Twenty years ago, it was said that Brazil was taking off, that it was one of the future world powers. Then, some years ago, Mexico was in fashion, then India. This was followed by the vogue of the "emerging countries" of Asia. Today the only take-off in fashion is that of China, a country with 1.2 billion inhabitants, where only 300 million have a standard of living that would permit them to be consumers in the global economy.

Even the current dominant global institutions concede that economic growth does not necessarily cause social improvement for the majority people in the world to live better lives. As the WB acknowledges,

> But history offers a number of examples where economic growth was not followed by similar progress in human development. Instead growth was achieved at the cost of greater inequality, unemployment, weakened democracy, loss of cultural identity, or overconsumption of natural resources. (Soubbotina 2000, 8)

Although there are very few cases of small countries, like South Korea and Taiwan, which "have managed to progress from agricultural societies to technologically advanced industrialized societies" as well as conquering the generalized poverty and raised living standards to create a predominant middle class as noted by de Rivero again ([2001] 2003, 112), they did not follow the orthodox policies of modernization advocated by the WB and IMF for national development. For instance, as revealed by South Korean Ambassador to Uganda in 2013, His Excellency Park Jong-Dae, South Korea realized that it had to do it on its own and "not to rely on foreign donations." It resorted to its "collective strength—the village movement . . . where community engages in nation building through voluntary and collective participation." Korea never "discarded" its "traditional (old) technology." It "simply developed them [*sic*]." Exactly in his words, the ambassador pointed out that "over time, we kept upgrading them to a point that they are now . . . You do not have to

start with a grand technology but make use of what you have and improve on it with time" (*Sunday Monitor* 2013). On aid dependency, he further pointed out,

> Aid dependency was spoiling our people. Many times, we disagreed with the donor partners and chose not to follow their advice. We took a decision to become export-oriented rather than depending on imports. We were advised then that this route was immature for us but we rejected that suggestion—and it has paid off. (*Sunday Monitor* 2013)

For development to take place in South Korea, there was state activism in the management of economic activity to promote national goals. The state used independent policies of economic nationalism to create national prosperity, unlike the foreign-directed modernization approach followed by most Third World countries today, especially at the time of globalization (Peet 2003).

Despite the evident past failure of social transformation in the Third World countries under un-self-defined modernization and without learning from the insignificant successful case studies, the myth of the emerging South is still propagated. Paradoxically, the myth is propagated when three-quarters of the world's poor live in middle-income countries (UNDP 2013), if one has to go by the misleading monetarist approach of measuring poverty reduction in the Third World countries. The categorization of countries above, which does not consider the internal productive capacity of a respective country, is misleading. When will Brazil, Mexico, and India, cited again and again as emerging economies, take off? This is simply playing upon the people's brain. Most of the Third World countries are all underdeveloped irrespective of the category they are put in because they have distorted economies without backward and forward linkages; they are neither integrated nor self-propelling. This is because they were deliberately underdeveloped during colonialism to produce primary commodities for export and import expensive manufactured goods (Mamdani 1976). Now, it is becoming clear that the peasant economy that was deliberately created during colonialism is being dismantled under macroeconomic stabilization policies to pave way for the land grabbing under way in Third World countries (see Borras et al. 2011; How macroeconomic stabilization and other measures are dismantling the peasantry in Uganda, see Byekwaso, n.d.-a).

However, a country depending on primary commodities, like oil and gas as well as other minerals for export exploited by foreign multinational corporations, as most Third World countries do and Uganda is basing its hopes on for modernization and social transformation (Uganda 2013), is not able to bring about improvement in the lives of the majority of its citizens. The multinational corporations are not in the position to create enough opportunities in a Third World country, even if the sector they engaged in may generate high growth rates. Consequently, the

growth rates emanating from the sector are neither generated nor beneficial to the majority of the people in the country; the ordinary people remain eking a living from uncertain sources, while the number of lumpens in towns continues to swell. As Paki and Ebienfa (2014, 113) have observed in the case of Nigeria,

> Be that as it may, peasants in Bayelsa state are seriously being exploited in the development process . . . The undeniable reality is that, whereas the multinational oil companies operating in the area reap multi-billion dollars as profits each year, the living condition of the peasants have been put in reverse and as such a turn for the worst due dominantly to its co-existence with the capitalistic system.

For that matter, the Western-determined modernization, with its interests in creating a favorable climate for multinational corporations (foreign investors) to make money from Third World countries, is generally concerned with profit making by the private sector but not creating prosperity for the majority of the people in the so-called developing countries to live better lives. The argument that "because all elements of society depend on private investments for economic growth, governments are obliged to make the profitability of their capitalists a priority" (Pratschake 2015, 462) is for the propaganda purposes of capitalism. Is it inevitable that all elements of society depend on private investments? It is argued, especially at the time of globalization, that the state has no role in economic development because it is inefficient. But China has achieved remarkable economic growth averaging 10% from 1979 to 2014 using savings that "were generated by the profits of state-owned enterprises (SOEs), which were used by the central government for domestic investment" (Morrison 2015, 7). Therefore, the argument that the state is inherently inefficient in managing economic activity does not apply in all cases but is expediently used by capitalists to push for a private-sector-led strategy of development to make profits and accumulate as much wealth as possible. Moreover, if the main motive of a private-sector-led strategy of development is for the capitalists to make profits in a free market economy enterprise as a way of promoting growth, then the development that takes place under this arrangement is either by accident or by coincidence but not by design. As Jong-Dae, the South Korean ambassador to Uganda, candidly puts it, "a liberal economy is good for business people and not so much for ordinary citizens" (see *Sunday Monitor* 2013).

Justification for the Failure of Modernization in Third World Countries

To justify why the Western style of social transformation has not taken place in most Third World countries, preconditions for modernization are set. These include but are not limited to the following:

> (I) Readiness to accommodate the process of transformation resulting from changes; (II) Continuous broadening of life experiences and receptive to new knowledge; (III) Continuous planning, calculability and readiness towards new experiences; (IV) Predictability of action and the ability to exercise effective control; (V) High premium on technical skills and the understanding of principles of production; (VI) Changing attitudes to kinship, family size and the role of religion; (VII) Changing consumer's behavior and the acceptance of social stratification. (Matunhu 2011, 66)

Using the politics of the leader being cunning and manipulative as with the Machiavellian style, the modernization theorists deliberately divert the attention of the people from understanding the exploitation taking place and dupe them into accepting foreign-dictated change that does not help them to improve their lives. It is the characteristic of modernization theory to attribute problems in Third World countries to internal causes but not external forces as the preconditions above illustrate. In Africa, traditional values, fatalistic attitudes, and lack of innovation and modernization tendencies (Hyden 1980; Burkey 1993) are blamed but not the exploitative nature and the structure of the economy; changing attitudes to kinship, family size, and the role of religion is a precondition for modernization as cited in Matunhu above. However as Odei Ajei (2007) argues convincingly with an illustration from the history of Japanese development, cultural values do not necessarily hold back development. Instead, they spur it if utilized correctly.

Lack of entrepreneurship, saving culture, and modernization tendencies are also said to be associated with each other; continuous planning, calculability, and readiness toward new experiences are also said to be other preconditions for modernization cited above. It is now emphasized, without considering the economic environment, which does not favor indigenous entrepreneurship, especially in Uganda (Briggs 2009), that "African entrepreneurship is central to Africa's future prosperity" (WEFA 2015). By implication, there is nothing wrong with the current approach to modernization, but the problem is lack of entrepreneurial skills.

The modernization theorists are a little shy. For a long time under the policies of neoliberalism, the government of Uganda, like many other governments of the Third World countries, has been compelled to attract foreign investors even at the expense of indigenous entrepreneurs (Briggs 2009) as a way forward. Now after undermining the economic prospects within the economy under macroeconomic stabilization, the youth indigenous entrepreneurs are being encouraged and trained. Why have the foreign investors in the past failed to transform the economy? Why were governments in the Third World pressurized to attract foreign investors to come when local trainable entrepreneurs were available in the first place? Even more perplexing, the policies of neoliberalism were introduced on the grounds that

there were entrepreneurs available in the Third World countries to turn around the economic stagnation brought about by the past policies of state intervention in the economy (Peet 2003). Moreover, the thinking behind modernization theory is that development is a natural process or unintentional (Sumner and Tribe 2008). Then, why turn around to train youth in entrepreneurship as is currently being done? This is the politics of manipulation and deceit at work.

Regarding predictability of action and the ability to exercise effective control, the colonialists "were interested in keeping order and maintaining the political and economic conditions for the exploitation of the colony" (Ake 1981, 142), the capitalists want strong governments in Third World countries to keep security for them to make profits without disturbance. The governments of the Third World countries should keep peace for the multinationals to make money.

However, as an added element of propaganda, the concept of good governance, which has reduced politics to a set of administrative procedures (such as transparency, participation, accountability, and efficiency) without considering the politics of policy formulation, has been designed. Bad governance, especially corruption, is emphasized as being responsible for the failure of development in Africa (Hendricks 2007, 54–55), particularly in Uganda where it is said that corruption leads to hemorrhage of public resource (Niringiye 2014). This is intended to divert the people's attention from the exploitative system of capitalism to corruption as a source of evil. In any case, can corruption be successfully fought under capitalism, which "prescribes private accumulation of profit and wealth, at all costs, as the very epitome of human and individual achievement" (Mbeki 2012), and that greed is a "guide, the goal and the god of the market-driven society" (Macarov 2003, 75)? There is corruption even in the US where Monsanto (a giant multinational corporation) uses its financial muscle to bend rules and have policies put in place in its favor (see Parker and Ryan 2014).

The Unmentioned Sins of Modernization Path

The modernization theory assumes that all the countries in the world have uniform historical experience. This is not the case. For instance, the West developed by plundering resources of the now Third World countries (Mandel [1968] 1977). If the Third World countries have to follow a similar path of development, where will they get other countries to dominate and plunder? This is hardly mentioned by the proponents of modernization.

In addition, as it has been argued by other scholars (in Berger [1992] 2008), is it possible for the countries of the world to reach the era of mass consumption of the Western countries without destroying the planet? As an illustration, in 1998, the rich 20% of the world population consumed 86% of the goods and services produced globally, while the poor 80% consumed the remaining 14% (in Harris

1998, 177). If all the people in the world were able to consume like the rich 20%, would it be possible without destroying the planet? Actually, the so-called developing are continuously restructured to serve as reservoirs for the few capitalists in the world to amass wealth and become billionaires. As an illustration, 62 richest persons from both the North and South own half of the wealth in the world (see *Oxfam International* 2016). How can the rest of the people catch up to become rich? If capitalism is a competitive system where all individuals have equal opportunities of succeeding, as we are made to believe, is it possible for the rest of the people in the world to become as rich as the above-cited 62 richest people?

The modernization theory does not consider the current international obstacles to development in the Third World countries, like the West preaching free trade abroad but practicing protectionism at home (Watkins and Fowler 2004). This is misleading. In addition and importantly, most underdeveloped countries have failed to become like the West because they are remotely foreign controlled, and are therefore exploited as they donate capital to the developed countries. For instance, there was a capital flight from 25 African countries amounting to US$193 billion over the period of 7 years (1970–96) according to a study carried out by some economists (Ndikumana and Boyce 2001, quoted in Zakumumpa 2014). Under the mentioned circumstances, the myth of the so-called developing countries is a lullaby sang by the parasitic West, so that the exploited people can continue to sleep as they are being sucked dry.

The Misleading Notions of and Approaches to Development

Development as Uprooting People from Rural Areas

For a long time, there was no notion of development for colonies until after the Second World War when the West led by the US charted a new form of domination of what came to be known as Third World countries. Consequently, as Ake (1981, 142) observed,

> Instead of the old partnership of the colonial days expressed in the "Dual Mandate," a new partnership in development was proposed. And this was propagated intensively in the United Nations through its agencies and in the launching of successive development decades. The interests of the Western world in all this lies in the fact that the fundamental concept in this ideology of development was generally some variety of permutation of the notions of Westernization, industrialization or capitalistic economic growth. Thus wanting development became virtually the same thing as wanting to be like the West.

As a result, the postcolonial African leaders propagated the notion of development in the minds of the people to be associated with urbanization and industrialization. From what is usually encountered in public places, many people in Uganda understand development as the emergence of towns with skyscrapers, shining office blocks, posh residential houses, superhighways, a fleet of vehicles, and the use of modern amenities like mobile phones and electricity by some individuals. It is assumed that since most people in the West live in cities and towns, the ordinary men and women in Third World countries have been made to believe that urbanization is a process toward being like the West. In addition, because the modernization approaches to development concentrate people, jobs, services, and amenities in cities (Goulet 1996, 2), many people link development to urbanization.

Unfortunately, this understanding of development is politics or ideology of modernization because the emergence of cities does not create conditions for the majority of the people to live better and creative lives.

For instance, the expansion of Kampala City and other towns in Uganda has led to the emergence of slums where the majority of people live but experience a life smelling some perfume of the city but tinged with odor not of the rural areas but of some different type, which is filthier than what is experienced in well-kept rural villages. Urbanization is uprooting the people from rural areas and exposing them to the shocks and stresses of food insecurity and homelessness (Nuwagaba and Mpuga 2005, 24). Is this modernization or malice after thought initiated from the West?

Without learning from the problems associated with the so-called modernity, Western experts compel Third World countries to blindly follow the modernization model of development through technical assistance. Should the Third World countries aim at aping the "developed countries," despite the avoidable problems the "developed" countries usually face resulting from business cycles (economic stagnations, recessions, and depressions) as well as social inequity. In preindustrial farming societies, unemployment is not a problem—what is the problem is fluctuating net revenue when business is bad (Colander [1993] 2004, 140) but not loss of livelihood. If the preindustrial farming societies are improved through cooperative organizations, without necessarily destroying rural communities as is being done under the current modernization process, would not the problems emanating from financial crises in the global economy be avoided in the Third World countries? Would not the situation where unemployment in developed countries is now "at its highest in years and a large share of the workforce has had no significant increase in real wages over the last few decades" (UNDP 2013, 22) be avoided in the Third World countries?

Development as Multidimensional

Within the modernization framework, there are schemes initiated to deceive and manipulate the people of Uganda and Third World countries that something good is being done for them when in reality the opposite is taking place. Under the macroeconomic framework, it is claimed that development is being promoted through economic growth and poverty reduction as well as social transformation (Uganda 2013). Consequently, it is argued that development is multidimensional—an argument that was used by some Western scholars (like Chambers [1983] 1988) to criticize the work of development agencies in the past. The misleading approach of multidimensional development has been in vogue from the 1980s to date. According to Burkey (1993, 38), development is multidimensional, comprising not only economic development, which emphasizes growth, but also social, cultural, and political as if they can be separated from each other. It is believed that a country should simultaneously implement economic, social, cultural, and political programs as the best way of improving the people's lives rather than promoting economic growth only. Social development accordingly refers to those investments and services carried out for the mutual benefit of the community or society rather than directly promoting individual incomes. Of recent, it is claimed that although "development of the socio-economic system is an all-encompassing endeavor, it is a process of change per se" "to a new stage" and "is a multidimensional concept in nature" comprising a number of features to be measured separately (Bellu 2011, 2).

The multidimensional approach is misleading because development is a political endeavor, and therefore economic and social development cannot be separated from a political or cultural arrangement. Economic policies to promote development are political statements (Peet 2003) to reflect the interests of either the dominant capitalists from the West under the current globalization, or the aspirations of the poor and disadvantaged masses, in both the developed and Third World countries struggling to liberate themselves.

Actually, if the multidimensional approach to development is correctly assessed, it is a multipronged strategy of cultivating the Western culture of possessive individualism based on market calculations in the Third World countries. Whereas the market forces are deeply penetrating societies in the Third World countries, the government with donor support in Uganda is undertaking public spending to engineer social and cultural development toward Westernization. Apparently, the social aspect of development under the multidimensional approach is in line with the basic needs approach and rural integrated development adopted by the WB in the 1970s designed to effectively promote the penetration of capitalism in the rural areas. Rather than aiming at assisting the poor, the modified approach from large schemes promoted by the WB then, it was seen as an attractive way of promoting

capitalism in rural areas. Peasant farmers were given services, like health and education services, while also giving them farm inputs on credit. The intention was to capture them while being integrated in the market to be effectively captured and exploited (Hyden 1980; Payer 1982). Now, social spending on water and sanitation, education and health services, and other public facilities is encouraged by the donors as a poverty reduction strategy (Mugambe 2010).

Since the motive of capitalism is to transform every resource into a marketable commodity (Machpherson 1962), it should be noted that public spending on water and sanitation is probably being undertaken to eventually commercialize water in the long run even in rural areas where it is still free of charge. On the other hand, it appears that education is sponsored by donors in Uganda and other Third World countries to promote value change toward Westernization while at school rather than inheriting the African culture. Therefore, it can be safely concluded that the idea of promoting Western education in Uganda and Third World countries generally is to bring up a generation of individuals who are interested in pursuing their selfish interests of making money and accumulating wealth without bothering about what happens to the rest of the society (see Mbeki 2012). The logic of promoting individualism in Africa and Third World countries can be traced from the ideas associated with a form of rugged individualism, expressed in Margaret Thatcher's famous assertion that "there is no such thing as society, only individuals and their families" (quoted in Heywood [1997] 2002, 50).

Human Development Approach

Since the 1990s, the UNDP adopted a measurement of human progress under the already discussed multidimensional approach. According to the human development approach, development is measured in terms of performance and human development indices. However, it should be mentioned that human development measurement (like policy formulation) is not a neutral exercise (see Peet 2003). For that matter, in this context, it is an endeavor undertaken to measure the extent to which individuals within the societies of Third World countries are being Westernized, or are progressively acquiring and adopting the Western values of individualism under the ideology of neoliberalism. As conceded by the UNDP (2013, 36), "The human development approach, however, has been essentially individualistic, assuming that that development is the expansion of individuals' capabilities or freedoms."

Therefore, human development is not necessarily concerned with the welfare of the majority but to develop individuals with the appetite for making money from their societies. It is assumed that if individuals accumulate financial reserves, then possibly the government would tax the rich to fight poverty (UNDP 2013, 8). Unfortunately for the people in the Third World countries, the approach totally ignores the development of capital in the form of equipment and machinery to increase the production of

goods for consumption and exportation; it is not concerned with the development of a local capacity to produce goods in the Third World countries.

Consequently, the measures of human development are not linked to the productive capacity of the concerned country. As an illustration, longevity is one of the indices of human development. However, one may live a long life, but what makes him or her live a long life? It may be concluded that longevity depends on the availability of adequate resources for one to live a long life. However, under the current approach of human development, there is no linkage between the availability of resources, especially food security, and life expectancy as will be illustrated using the case of Uganda. Actually how life expectancy in a country is measured needs to be scrutinized considering the Machiavellian politics of modernization discussed in this article.

In addition, some of the indices measured under human development, like access to services (including measuring literate levels as an outcome of access to education), and gender equity, do not make economic sense. For instance even if education creates room for one to be employed, it is of no use if its graduates fail to get employment as will be illustrated again using the case of Uganda. Further, it may not help much if people have access to clean water and health facilities if they are not well fed as is the case in Uganda; food insecurity has increased as will be illustrated again using the case of Uganda. Can the people remain healthy without feeding well even if they are treated at health centers? With gender equity, it does not make sense when there are limited opportunities within the society for both men and women to succeed and live productive lives as is the case in Uganda (see the section on Uganda).

While the UNDP adopted the multidimensional approach, whose weaknesses have been identified above, the United Nations (UN) came up with the Millennium Development Goals (MDGs), but like the past development decades, have come to pass without much improvement in the lives of the majority in the Third World countries. Instead, few billionaires have emerged in both the North and the South as observed by the UNDP (2013). Again, the UN has come up with the current Sustainable Development Goals (SDGs). It should be curiously noted that both the MDGs and SDGs mention fighting poverty as their priority. It seems that the meaning attached to poverty in the mentioned development goals is neither concerned with increased income to the poor nor improved well-being for the majority of people in the Third World countries. It can be said that fighting poverty, according to the successive UN goals, means resolving the agrarian question to make peasants disappear, so that societies of Third World countries can become like those of the West. As a result, it seems fighting poverty means a protracted war against peasants in Third World countries to separate them (peasants) from their means of subsistence as a way of making them totally dependent on capital,

like the people in the West are. This is what resolving the agrarian is about (see Akram-Lodhi and Kay 2009).

Postmodernism Attack on Modernization

The approach of modernization to development has been engaged by a loose movement known as postmodernism, which argues that the concept of development is not an objective reality but a social construct; it "is a 'discourse' (a set of ideas) that actually shapes and frames 'reality' and power relations" (Sumner and Tribe 2008). Accordingly, the current modernization of development is an imposition of Western values on the societies of Third World countries leading to bad outcome.

The postmodernism movement, sometimes labeled as antidevelopment (see Corbridge 1995, 8) possibly because it is against the Western form of development associated with exploitation and ravaging of the societies of Third World countries, has evolved into a new discipline known as development ethics (see Goulet 1996). According to this promising approach, development "must grow from within and not slapped from outside" (James 2013), according to the concerned people's culture, especially African culture (Kanyandago 2002). They have a very strong and convincing argument regarding endogenous development; for genuine and sustainable development to take place, it must come from within but not imposed on the people from outside, as is happening under the current policies of modernization and globalization. According to African ethicists, the erosion of indigenous culture by the Western intrusion is held responsible for the existence of rampant poverty on the continent, and therefore they advocate the revitalization of African institutions and values (Odei Ajei 2007; Matunhu 2011).

The weakness with this approach is that it does not seriously analyze how the market forces under globalization penetrate and erode African culture. Some go an extra mile of rejecting epistemology using Western scientific thinking and political economy in analyzing the society (Odei Ajei 2007; Kanyandago 2002). Unfortunately, the scholars of reviving African epistemological approach in fighting the externally imposed modernization do not address the issue of how the invisible hand of price mechanism under the so-called free trade is wreaking havoc on society (including ethical practice). Although the article shares some commonalities with the scholars, especially on advocating for endogenous development and the revival of African culture as a tool of fighting foreign-imposed modernization, it does not agree with them on the use of the knowledge of political economy, derived from Western epistemological approach dabbed as "economism."

It is argued in this article that without understanding how the invisible hand of the market is used politically by the capitalists from the West to undermine the

development of society in all aspects in Africa, it is very difficult, if not impossible, to successfully fight the externally imposed modernization ideologically. The scholars using African epistemology do not talk of the development of productive capacity in the form of the Western-oriented science and technology seen as Westernization (see Odei Ajei 2007), and some are opposed to a market economy seen as Western culture (see Kanyandago 2002). By failing to address the issue of the development of productive forces (including the training of human resources to become conscious of the machinations of subtle imperialism using the market forces that have penetrated our society through commercialization of the economy), they have not been able to explain why Africa was conquered and now recolonized without even using military force.

Therefore, it is necessary to merge the endogenous approach with the political economy approach; the endogenous approach to the understanding of development needs to employ the Marxists analyses of capitalism's contradictions because the Marxists analyses show how "capitalism has spread all over the world" with "the greater part of the world" experiencing "only its disintegrating effects, without benefiting from its creative side" (Mandel [1968] 1977, 441). With the Marxist and endogenous approaches to the understanding of development, which are not opposed to each other anyway, the economies and societies of Third World countries can be secured from foreign capitalistic forces, using modern economic policies, like state intervention in the management of economic activity to promote national goals (Kiiza 2003). It is true that there is a need for growth from within and cultural revitalization, for instance in Africa, as a way of defending the society from foreign forces as well as mobilizing the people for development. However, this cannot be achieved without clearly identifying how the global market forces influence or have influenced negatively the development of Third World countries, so that counter economic policies can be put in place.

Uganda's Experience and Lessons to Learn from Chinese Economic Reform

The misleading policies of reform for modernization have been consistently implemented for a long time in Uganda, with deleterious effects, under Museveni's regime that has been in power for 30 years.

Museveni, thought to have been a socialist, came to power in 1986 after fighting Obote for 5 years and overthrowing Tito Okello Lutwa (who overthrew Obote) in a coup. Soon after, he got converted to the ideology of liberalism. Museveni followed the recommendations of the IMF and the WB to the letter. Appearing as a "good student" in the troubled Great Lakes Region, he seduced the West—especially the United States—which did not spare its support for him. Aid flowed,

"growth, economic stability and peace" followed. Labeled by the Western donor community, Western nongovernmental organizations (NGOs), big businesses, and the media as "the only guarantor of national security and peace," the Ugandan President remains a key ally of the West, especially in their fight against terrorism (see Michel 2010).

Museveni adopted the IMF and WB economic orthodoxy on the necessity for macroeconomic stability through tight monetary policy in the late 1980s, and has been loyal to this position ever since. Perhaps he recognized the necessity of economic stability to his political survival (Mwenda 2015).

Since adopting the economic orthodoxy, claimed to have resulted in impressive economic growth rates and fast declining poverty levels, Uganda has been falsely projected internationally by donors as a success story to be emulated by other Third World countries (see Whitworth and Williamson 2010). According to a report published in June 2015 by the Centre for International Development (CID) at Harvard University, Uganda's economy is expected to grow at an impressive rate of 6% annually, adding that India and Uganda are poised to lead global growth in the next decade (with average annual growth projections of 7.9% and 7.0% for India and Uganda, respectively). However, it should be noted that the projected economic growth rates are dubious because they are not generated by the country's own productive capacity, which has been eroded by the policies of economic reform as conceded by even Museveni as will be illustrated shortly. Therefore, it is not surprising that a month later after the above-mentioned report, *The Monitor* (2015), a Ugandan daily asked, "Can we trust Uganda's economic growth figures? Not quite! Ordinary Ugandans are struggling with low salaries, collapsing infrastructures and runaway corruption" (see Biryabarema 2015).

The growth rates talked about are usually donor-driven and therefore do not have a far-reaching impact on the majority; the assumed occurring economic growth in Uganda "has been produced by a huge inflow of financial aid coming mostly from the United States, reaching up to today [2013] almost 60–70% of the total state expenses" (Martiniello 2013, 16).

Even President Museveni sometimes concedes that the growth is not genuine. Maybe for continued political support, to make people believe that he has identified loopholes within the economy, characteristic of Machiavellian politics, sometimes he points out the problems of Uganda's economic growth. For instance, in his State-of-the-Nation address of 2012, he examined the growth that took place within a period of seven years (2004–11), which illustrated that the economy is dominated by the parasitic service sector (rather than agriculture and manufacturing sectors that would produce tangible goods for internal consumption and exportation). He then concluded, "This is the paradox of the present economy: growth without creating enough employment and without earning enough foreign

exchange, but instead squandering the foreign exchange earned from coffee and other raw-material exports." The statistics quoted by Museveni indicated that the economy had grown as follows: banking sector—17.2%; transport and communication services including mobile telephones—14.3%; hotels and restaurants—8.8%; real estate—5.6%; other business services (saloons, stationery, sales, etc.)—9.7%. Compared with the growth in manufacturing and agriculture, the figures were as follows—6.5% and 1.4%, respectively (for the quotations, see *New Vision* 2012).

Under the reform, with the vital sectors of the economy performing poorly as acknowledged by Museveni, the food situation is worrying; the situation has been changing from good to bad. When National Resistance Movement (NRM) government came to power, the country was almost self-sufficient in food production. After the implementation of the market reform to bring about modernization by exposing farmers to price fluctuations and in the process of making farming unprofitable and therefore displacing the peasants from their means of subsistence, by 2007 the country had become a net food importer (UNDP 2007, 76; see also Byekwaso, n.d.-a). Currently, even the peasant farmers in rural areas are net food buyers, a situation that did not exist in the past (see Akello 2011). Is it any wonder that the rate of child malnutrition is worrying even more in Western Uganda (40% of the children are affected; Sewanyana and Kasirye 2011), where it is claimed that a large percentage of the people are jumping out of poverty (UBoS 2013)?

According to the most recent report released by the Food and Agricultural Organization (FAO) together with the agriculture ministry, quoted by the press, 70% of the Ugandan population is moderately, severely, and chronically food insecure. "Severe and chronic food insecurity is described as a situation where a person may go without food for as many as three days, while moderate food insecurity is where a person goes without food for a day" (see *New Vision* 2016). This implies that 70% of the Ugandan population goes without food for at least 1 day.

Ugandans are increasingly exposed to food insecurity, possibly because Museveni has been fighting the production of food for own consumption to serve the interests of multinational corporations (Asiimwe 2011) in the name of fighting poverty. In the New Year's message of 2015 delivered at the state house at the end of 2014, President Museveni claimed that "subsistence farming has been the main cause of poverty in the history of Uganda" (Museveni 2014a). Some time back, he had attributed poverty not only to what is called subsistence farming but also to the tradition and the mentality of producing for own consumption (Museveni 2014b).

The war on peasants by fighting the production of food for own consumption, through commercialization of agriculture, was vigorously pursued in Uganda from 1987 onward with the launch of the Economic Recovery Program (ERP) in

line with the macroeconomic stabilization program of the WB and IMF. The war on food production for own consumption President Museveni has been waging in Uganda is on behalf of the WB, which has been fighting peasants for a long time, so that they can disappear and make the people of Third World countries "buy food from transnational corporations in the global market rather than grow it themselves" (Holt-Giménez and Kerssen 2015).

While fighting the peasants who are the majority in Uganda, in Machiavellian style, President Museveni has been deceiving the country that he has a strategy of making everybody rich under the Prosperity for All Program (*Bonna Baggawale*). Under the program, a household would be able to generate enough food and with financial security of at least UGX 20 million (approximately US$5,882 according to the exchange rate in May 2016), every year. The program was described by a Ugandan legislator in 2010 as a "charade and impractical joke" (Isaac 2010). However, it should be noted that the so-called prosperity for All Program is preoccupied with a micro-credit strategy (Uganda 2009) for enslaving Ugandans at a household level as has already happened (see Byekwaso 2010).

Regarding the West propping up Museveni with aid, as the daily Monitor has observed,

> This is what happens when the world starts forgetting the importance of the simple word truth and starts living on hype. Western governments and the media, trying to get over their guilt from apartheid in the early 1990s, created a rosy picture of Africa's economies. African governments in turn, needing political legitimacy, started to publish often false economic data of non-stop growth, even as their citizens continued to climb onto shabby boats and head across the Mediterranean and Red Seas in search of jobs. We are now at the point where the rosy picture painted of Uganda's economy for years is being exposed for what it was. (Kalyegira 2015)

In the West, Museveni has been nicknamed the "Bismarck of Africa" for a reason. According to the article Elias Biryabarema had already cited in Good Governance Africa (GGA), Uganda's president Yoweri Museveni, in power for 29 years, often points to Ugandan security concerns and the "pan-African spirit" to justify foreign military adventures fueled by Museveni's greed and personal political ambitions. In fact, most analysts see these interventions as moves by Mr Museveni to strengthen his power at home and distract Ugandan citizens from their domestic woes while carving out a role for himself as the West's point man in the unstable resource-rich region. Uganda has about 5,000 troops putting out fires (or fueling out fires?) in neighboring South Sudan and the Central African Republic. These latest operations follow a long trail of controversial invasions and aggressions

in other countries in the region, including the Democratic Republic of Congo (DRC) and Somalia as well as Rwanda (Museveni was the main backer of Kagame's Rwanda Patriotic Front). However, for having invaded Congo together with Rwanda (Rwanda and Uganda now host many American military bases), killed more than eight million Congolese, used rape as a weapon of war, and systematically looted Congo's natural resources, the International Court of Justice at the Hague ruled that Uganda should pay compensations to the DRC worth US$11 billion.

Still according to GGA, with East Africa emerging as an important front in the war on terror and Mr Museveni fashioning himself as a dependable ally, the West has maintained its warm relations and appears to overlook Mr Museveni's excesses (no presidential term limits and other democratic issues as well as human rights issues).

The "Bismarck of Africa" is indeed exploiting these diplomatic, military, financial (aid), and political capital cunningly very well. But for how long?

Lessons from China's Economic Reforms

If Museveni were not interested in having close ties with the West for personal interests of clinging on to power for as long as possible, Uganda would have borrowed a leaf from China's economic reforms. "China's gradual implementation of economic reforms sought to identify which policies produced favorable economic outcomes (which did not) so that they could be implemented in other parts of the country" (Morrison 2015, 4–5). As a result of self-defined reforms, China's economic growth has been really impressive, unlike Uganda's doubted one. While Uganda's dubious economic growth has been foreign-driven, China's annual real GDP that averaged nearly 10% from 1979 to 2014 came as a result of large-scale capital investment from high domestic savings (both corporate and household savings. Although the Chinese government liberalized the economy, the SOEs that generated profits, "which were used by the central government for domestic investment" (Morrison 2015, 7), played a big role in the development of Chinese economy.

However, the state-owned economy that determined China to develop on its principles and "determines the very existence of China's socialist system and the fundamental interest of all Chinese people" is now under attack. There are few people who aim to restore capitalism in China and for that matter "always target the state-owned economy, trying to demonize it through ways of detraction and distortion" (Xiang 2015, 576). Pressure is being mounted from external forces, especially from the US.

The government of China is encouraged

> to increase the role of the market in the economy, boost innovation, make consumer spending the driving force of the economy, expand social safety net coverage, encourage the development of less-polluting industries (such as

> services), and crack down on official government corruption. (Morrison 2015, 1–2)

If the government of China succumbs to the pressure, then it will have accepted foreign-directed reform or modernization, which will reverse the achievement of the Chinese people under the self-defined reforms. The innovation encouraged in China is the politics of modernization discussed in this article. To make consumer spending the driving force of the economy is to make China, like Uganda, an import-dependent economy without the production of goods for local consumption and exportation, and therefore China's growing influence in the global economy will be halted, if not destroyed.

The closing of SOEs under way, as is reported by the Western press, will "leave behind abandoned mills and broken lives" (*The Guardian* 2016). It will leave the industrial production of goods in the hands of foreign-invested enterprises (FIEs), which,

> to take advantage of China's abundance of low-cost labor, . . . import parts and components that are assembled into finished products, such as consumer electronic products and computers, and then exported. Often, the value-added to such products in China by Chinese workers is relatively small compared to the total value of the product when it is shipped abroad. (Morrison 2015, 23)

As a result, the Chinese economy will risk the possibility of total collapse, if the FIEs relocate to other parts of the world as a political weapon.

The strategy to close SOEs while making consumer spending as the driving force of the economy as well as depend on the service sector can be compared to the strategy of compressed demand under macroeconomic stabilization in Uganda that has ruined the indigenous private sector as well as ruining the whole economy. The Ugandan economy is perpetually faced with the balance of trade and payment problem, depending on foreign borrowing to alleviate it (how compressed demand under macroeconomic stabilization was used to destroy the vital sector of the economy, see Byekwaso, n.d.-b). While Uganda should have learnt from Chinese successes, China should learn from Uganda's failures.

Conclusion: The Problem of Un-Self-Defined Development

It is apparently clear from the discussion that most approaches to development under modernization theory are concerned with the promotion of Western culture in Third World countries based on possessive individualism under a market economy, without necessarily aiming at industrialization. As a result, the development

of the local productive capacity is progressively being eroded as the indigenous culture is also being equally eroded. For instance, in Uganda, under the so-called National Agricultural Advisory Services (NAADs), local plant and animal breeds have been discouraged (Uganda 2000). Therefore, the local farming methods and techniques learnt by the farmers over a long time have been seriously affected with the introduction of the so-called exotic breeds, including GMOs secretly introduced (see Byekwaso, n.d.-a) that require related new farming skills as well as inputs. That is one example. The policies of macroeconomic stabilization imposed on most Third World countries in the name of modernization have effectively eroded the development of the local productive capacity in order to complete "an incomplete penetration of traditional society by a weak colonial state" (Mamdani 1996, 285).

On the other hand, through the market forces, education and other socializing agents, like the media, people with the thinking that supports or approves the policies of the modernization model of development have been created. A new culture based on individualistic values of the West based on greed for making money through deception (*Kiwani*), meaning fake capitalism (*okuyiya*), meaning scheming to make money at all costs, is taking root in Uganda. For example, it is now a common normal practice for taxi operators in the country to deceive passengers that their vehicles are about to be filled when actually the vehicles are almost empty.

To counter the negative effects of modernization, there is a need to resist the influence of the Western culture. The negative effects of modernization cannot successfully be resisted without a political ideology that links development to the development of local productive capacity, which in turn leads to the production of goods, so that the people can not only survive on mainly their own efforts but also progressively live better and creative lives.

Therefore, development should be seen in terms of the capacity the country and individuals within the country have created to utilize local resources, using their own visualization and to a greater extent internally developed capital. Then, the capacity is used to process and convert the local resources into finished consumer goods for consumption and exportation, as well as being able to negotiate better deals in the international market. As more goods are produced and marketed, especially within the national borders, as well as traded on mutual exchange internationally, most likely more job and economic opportunities will be created. To increase goods for consumption, technology has to be developed or adapted. However, the adoption and development should be according to the interests of the people not for the sake of modernization to become like the West.

Let it be emphasized that for genuine development in any country to take place, it is supposed to be self-defined (Tandon 2008, 12) by setting own priorities to reflect the aspirations of specific societies or economic classes. Economic policies

are formulated in a social context, a framework created to serve certain political ends or national interests; economic issues and policies are neither technical nor neutral (Peet 2003).

If a country cannot define development for itself, it is not independent and if policies for development are imposed from without, development and poverty reduction lose meaning. For instance, in Uganda under the policies of macroeconomic stabilization, the expansion of the monetary size of the economy based on the growth in consumption (Byaruhanga, Henstridge, and Kasekende 2010; Whitworth and Williamson 2010), especially of Western goods and services, is the yardstick of good economic performance. Why? The growth in the consumption of Western goods means that the Western companies are increasingly making money from Uganda and Third World countries, and when capitalists, especially from the West (foreign investors), make the money from Uganda, then the economy is said to have grown and poverty reduced. Is it any wonder that while the majority in Uganda is increasingly facing hardships, it is claimed that the economy is performing well and that poverty is fast reducing. Foreign-determined economic policies are weapons of recolonization without shooting a bullet. Even if a country may have a national army, if it adopts foreign-determined economic policies, the army is used to defend a government serving foreign interests at the expense of the welfare of its citizens as the case of Uganda illustrates.

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