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Updates of Empirical Estimates of Marxian Categories: The Philippines 1961-2012

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Updates of Empirical Estimates of Marxian Categories: The Philippines 1961–2012[*]

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Abstract

The economies of developing countries have a dualist structure in which feudal and capitalist modes coexist and interact. For the Philippines, this dualism is evident. This paper analyzes the Philippines's economic structure through a theoretical framework that draws on a Marxian theory interpreted by Wolff (1977, 1979): the model of social disarticulation and the creation of relative surplus value. Adding on to estimates for 1961–2000 for further analysis, this paper updates the estimated Marxian categories for the Philippines using the Input-Output tables from 1961 to 2012 and the formal model used by Venida (2007, 2011). Results of the estimates show labor productivity improvements from 2000 to 2012, which point to the possibility that the Philippine economy could have begun to transition to further capitalist expansion.

Key words: input-output, labor productivity, Marxian theory, Philippines, relative surplus value
JEL Codes: D57, E11, E24, J24

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INTRODUCTION

The Philippine economy has experienced an unprecedented stretch of uninterrupted economic growth from 2000 to 2018. This has been unusual in the country's economic history and it has been analyzed by Felipe and Estrada (2018) as well as Clarete, Esguerra, and Hill (2018). Both have noted the increase in productivity gains during this period. At the same time, poverty rates, inequality, and unemployment have persisted but have declined to a certain degree. Venida (2000) has noted that the country's transition to a developed economy—a fully capitalist economy—may be delayed due to the presence of a well-entrenched landed aristocracy that has maintained substantial control over the country's political system. Also, the surplus of the economy has been generated by way of absolute surplus value rather than relative surplus value or by way of improvements in labor productivity. The dominance of absolute surplus value was made possible by the country's large, precapitalist informal sector that functioned to depress the family wage or the cost of reproduction of family labor (Venida 2007, 2011).

This paper updates the results of the 2011 study with the use of the latest 2006 and 2012 input-output tables. These tables were timely as they can be utilized to appraise this unprecedented era of continued growth over at least seventy continuous quarters (Felipe and Estrada 2018). With the use of the same Wolff interpretation (1977, 1979) of the Marxian theory of economic development and the de Janvry and Sadoulet (1983) framework of a developing economy as a socially disarticulated society, the paper identifies indicators that may suggest a definitive transition to capitalist expansion. These will include the increase in the rate of relative surplus value, the degree of labor productivity improvement, the size of the informal sector, the distribution of income, and the growth of the population.

THE THEORETICAL STRUCTURE

THE BASIC CONCEPTS[1]

Marxian theory is regarded as a synthesis of classical economic theory (Blaug 1997). Classical economic theory was largely focused on long-term economic development. This can

[1] This paper draws on concepts previously used in my article for Philippine data from 1961–1994, specifically economic surplus, economic labor and its usefulness, long-term development, developed capitalist economies, and social disarticulation. See Venida, 2007, "Marxian Categories Empirically Estimated: The Philippines," *Review of Radical Political Economics* 39 (1): 58–79.

therefore be a workable framework to analyze long-term change in the economy. The approach begins with looking at the relationship of surplus, labor productivity, capital accumulation, and unproductive labor or activity (Wolff 1987).

Economic surplus is the difference between a society's gross product and the portion of the product necessary for the subsistence of the productive members. This product is the total product less the amount needed to replace the means of production or the produced inputs used up during a given period. Subsistence refers to a standard of living by which a class of productive members can maintain and reproduce itself. It could refer to a level of consumption by which families are able to support and expand their numbers—a standard of living. Implicit in this notion is a differentiation between a productive and an unproductive class of workers.

There is much debate regarding this concept of unproductive labor and its usefulness (Laibman 1999; Wolff 1987). The crucial factor in this distinction is the effect on capital accumulation or the capacity of a society to produce goods and services. Smith (1967) argues that a higher proportion of labor engaged in unproductive activity reduces the potential productive capacity of a society and thus its capability for long-term sustained growth. A loose interpretation of unproductive activity would restrict it mainly to the military, legal and judicial, administrative and management occupations, the religious, and activities related to the circulation of goods, namely trade, finance, and accountancy (Wolff 1987). Development is accelerated when a larger proportion of the surplus is devoted to the increase in manufacturing plants, equipment, infrastructure, and improvements in the productivity of labor, such as education, skills training, and health care. Long-term development requires not just a larger proportion of labor devoted to productive pursuits but also a high level of labor productivity. Thus, a larger portion of the surplus needs to be reinvested in labor productivity and capital accumulation to realize long-term development, otherwise growth will be retarded.

The developed capitalist economies are classified in Marxian analysis as fully capitalist or "socially articulated economies." These are characterized by tight backward and forward linkages among the domestic production sectors (de Janvry and Sadoulet 1983). These linkages allow for the realization of multiplier benefits of domestic investment and consumption. The main source of local demand is wage income and the growth sectors are by and large engaged in the production of wage commodities. Nonwage income is also present but is not the major determinant of demand. Labor productivity improvements increase the standard of living of wage earners. But capitalists

also gain because the greater efficiency of labor, especially in the production of wage goods, results in larger surpluses (Aglietta 1979).

In the theory of social disarticulation, development is the process by which an economy evolves from feudalism to capitalism (de Janvry 1981). A developed economy is one that is a fully mature capitalist economy, a socially articulated one. A developing economy is one that is still in transition from a feudal mode to a capitalist mode. It is therefore socially disarticulated because feudal and capitalist modes coexist and interact. The social classes of feudalism and capitalism are both present in a socially disarticulated economy. The prospects for development will depend on which social class interest dominates. Just as in a socially articulated or fully capitalist economy, the capitalist also acts as the agent promoting capital accumulation and labor productivity in a socially disarticulated economy (de Janvry 1981; de Janvry and Sadoulet 1983). But there would be capitalists who would be inclined to invest a portion of the surplus outside the country (Beja 2005). When added to the usual expenditure on unproductive activity (Wolff 1987), this retards economic development.

The dualist structure of developing economies can be traced to the incursion of mercantile capitalism, sponsored by the more fully mature capitalist colonialists, into the precapitalist social formations. Rather than gradually evolving out of feudalism toward capitalism as did the Western Europeans, the mode of production becomes socially disarticulated because both capitalist and feudal sponsors cooperate in integrating the feudal system into the international capitalist mode of production. From the perspective of social disarticulation, economic development would mean the successful transition to a fully articulated capitalist economy (de Janvry and Sadoulet 1983; Warren 1973). Improvements in labor productivity would translate to an improvement in the standard of living of the productive working class such that they become a major source of demand (Aglietta 1979; de Janvry and Sadoulet 1983). Development will be accelerated if a larger portion of the surplus will be reinvested in capital accumulation and labor productivity; otherwise, development will be retarded.

Because a substantial amount of surplus labor exists in a less developed country's economy, the wage rate is necessarily far lower than for a developed country's economy. Less developed economies are regarded as having a dualistic economic structure, where a modern or capitalistic sector coexists alongside an informal or precapitalist sector with substantial unemployed and underemployed labor (de Janvry 1981; Myint 1986). Estimates on the Philippine

economy suggest that the informal sector comprises anywhere from 35 to 60% of the total GNP (Llanto 1998; Medina and Schneider 2018). In fact, De Janvry (1981) argues that the capitalist sector benefits from the informal sector, which depresses the wage rate because of the huge supply of labor.

From the perspective of Foley (1986) and Picchio (1992), one can also argue that given the huge supply of labor in the informal sector and in the absence or lack of laws effectively restricting child labor, the surplus would be higher in the less developed countries. This is because for a given wage, the labor supply or the supply of labor time need not come from just one but also other members of a laborer's family. The money wage can even be low because family members engage in noncommodified home production of wage goods such as food, clothing, and home furnishings (Llanto 1998; Todaro 2000). Therefore, the rate of surplus value is higher in a less developed country than in a developed economy, as verified by Venida (2007) by comparing the rates for the Philippines with those for the USA and Puerto Rico.

Under capitalist production, the interest of the capitalist is to obtain as much of the labor time for the lowest wage possible, regardless of whether or not a laborer is getting paid an adequate wage. Thus, a wage-earner can get paid the legislated minimum wage of P500 for working eight hours in one day, which is the full-time work day. But the capitalist will be gaining more by paying one worker P300 for six hours a day and another P200 for four hours. In total, the capitalist pays P500 for a total of ten hours of work with the two working part-time. In a family of three where one member is employed full-time and the other two working part-time, the entire family gets daily earnings of P1000 but collectively provide only eighteen hours of work. The other two members effectively reduced the hourly rate thereby acting as a family subsidy to the capitalist enterprises, which can pay double for more than double the number of hours of labor.

Historically, the formation of labor unions in Western Europe was able to prevent this family subsidy from happening by restricting children and women from working. This would force business enterprises to pay laborers the full adequate daily wage that would be sufficient for the family's needs and allow families to have children to maintain the labor force of the economy (Foley 1986). But with a large informal sector that is growing given the high population growth rate, this ability of unions and the labor sector in general to bargain—for reduced labor hours at adequate wage rates—is severely hampered. In large family sizes, there are members who will be willing to work part-time at less than the minimum wage as in the examples above for capitalist

enterprises to obtain more labor-hours at a lower per hour or per day rate. This is thus a form of family subsidy to the capitalist enterprises. In an informal sector setting, some family members will be engaged in small businesses and in the backyard production of food (Picchio 1992). These activities augment the real earnings of the family in addition to the wage earned by members employed full-time, but this also diminishes the necessity for laborers to form unions and bargain for restricted work hours and higher hourly or daily wage rates.

Under these circumstances, capitalists therefore can obtain more labor hours for the same wage rates and thus increase absolute surplus value. They would have little incentive to invest in labor-saving technology and improved labor skills, which increase relative surplus value. Thus, the increase in relative surplus value would be the indicator that investments in technology and improved labor skills have begun to be dominant in the production process and that the supply of low-skilled laborers from the informal sector have begun to diminish. This process will then suggest the increasing dominance of capitalist production that would be integrating increasingly more of the laborers from the precapitalist or informal sectors.

The over-all economy-wide increase in labor productivity can be measured by the rate of relative surplus value. Absolute surplus value is the difference between the total labor time expended in the production of goods and services as well as the labor time required to produce the wage goods necessary to maintain the laboring class and reproduce itself for the next generation. The time required to produce the wage goods can also be called the cost of reproducing labor or the cost of maintaining the average standard of living of the working classes (Foley 1986). Relative surplus value results from the over-all improvement in labor productivity that results in a decrease in the time socially necessary to produce the wage goods, or the decrease in the cost of reproducing the working class, or the decrease in the real wage.

Absolute surplus value can be increased by lengthening the working day. There is a limit of course to the length of the working day. A single worker can be driven to exhaustion if not provided with time for the necessities of sleep, eating, and rest. But capitalist production is interested in obtaining the labor time that the entire family can supply not the labor time of the worker (Foley 1986). The family after all provides unpaid subsidy to the working members and for as long as entry and exit to the labor force is not restricted (as in the case of the informal sector of developing countries) then family members can take turns augmenting the labor supplied to the

production process. In this way, the working time is extended and is not limited to just the laborer himself or herself but to the entire family. In the formal sectors, this is made possible by two-income families. In the informal sector, even children are involved in the production process. However, the wage or the cost of reproducing the working class has not changed.

In this paper, the rate of relative surplus value will be compared to the rate of surplus value (simply, the rate of absolute surplus value) to examine if substantial labor productivity improvements have been undertaken in the Philippines. The role of family labor itself is not formally modeled but its effect can be inferred as a possible explanation for any increase in the length of the working day, i.e., an increase in the rate of absolute surplus value. An indicator of the increasing dominance of capitalism and gradual absorption of the informal or precapitalist sector is the increasing rate of relative surplus value over absolute surplus value, as verified for Puerto Rico (Wolff 1977).

THE EMPIRICAL MODEL

The formal mathematical structure of the model can be found in Venida (2007, 2011). In this section, the empirical model will simply be restated. The model uses input-output analysis and it follows the method applied by Wolff to the data for the US (1979) and Puerto Rico (1977), which was adapted by Venida (2007, 2011) for the Philippines.

Depreciation is regarded as a cost in classical analysis. It is thus incorporated as an endogenous row in the transactions table from the primary input matrix in the standard Leontieff input-output scheme. To obtain a balancing column, the best would be one indicating the actual expenditures on replacing or reproducing the depreciated portion of the capital stock. Since these data are not readily available even in the US, one can form this column by partitioning the gross domestic capital formation column into two such that one column equals the depreciation row. The residual would be regarded as the net domestic capital formation (CF) column. Thus, this assumes that the sectoral distribution of depreciation expenditures follows that of the gross fixed capital formation. This will result in a, the Marxian matrix of inverse coefficients which is based on the Leontieff matrix of transactions augmented by the depreciation column and row.

$$\text{Let } q^{*} = (I - a)^{-1} \qquad (1)$$

One would need some estimate of the standard of living of the productive members. In constructing the vector of productive consumption, the assumption is that all those earning

compensation income in whatever sector are the productive labor. Thus, the total compensation in the productive sectors plus transfer payments less taxes paid would be the measure of the standard of living. But because data on income taxes paid less transfer payments are not available on a sectoral level, then the total compensation would be construed as total consumption of the productive class. As pointed out previously (Wolff 1979), this assumes that in the long-run labor does not generate any savings. But because taxes net of transfers cannot be deducted this procedure may overstate the standard of living of the productive class.

But as Picchio (1992) also argued and as stated above, the money wage can also understate the actual standard of living of the working class given that they also receive a family subsidy in the form of family production of subsistence goods—a fact that is especially prevalent in the informal sectors of less developed countries. Thus, one can argue that this method of estimating the standard of living of the working class may be solidly justifiable.

Therefore, to estimate the vector of productive consumption M, the consumption column in the final demand matrix would be partitioned such that one portion equals the total compensation of the productive class and this would be the productive consumption vector. The residual would represent surplus consumption. Each element of the vector of productive consumption M will be divided by the column sum to yield m, the vector of productive consumption coefficients.

To estimate labor values, one would need vector l, the vector of labor coefficients per sector. This however is not available for all the years with input-output tables so that one would then need to use the vector of wage coefficients, just as it was applied to the Puerto Rico data (1977). In a sense, this approach is more theoretically accurate since wage rates are roughly proportional to skill level so that wage coefficients become a general index for reducing various kinds of skilled labor to unskilled labor (Wolff 1977). In contrast, labor coefficients do not differentiate between skilled and unskilled labor. Thus, wage coefficients hew closer to the notion of labor value as based on simple, abstract, social, and necessary labor, as argued by Marx (Foley 1986). If λ is the vector of labor values and vector l, the vector of wage coefficients is then:

$$\text{Let } \lambda = lq^{*} \qquad (2).$$

The value of labor power or the variable capital advanced per worker is equal to λm. The rate of surplus value (the ratio between surplus or uncompensated labor time and compensated labor time) is therefore estimated by

$$\varepsilon = (1 - \lambda m)/\lambda m \qquad (3).$$

This can also be construed as the ratio of total surplus over the portion of total output used for the subsistence and maintenance of the productive class. In conventional terms, ε is the ratio of property income to compensation income.

Total variable capital V and total surplus value S (or the social surplus) is estimated by

$$V = \lambda M \quad (4)$$

$$S = \lambda M \varepsilon \quad (5).$$

The organic composition of capital—or the capital-output ratio—is defined as the ratio of total constant capital to total variable capital advanced in the economy per turnover period (Wolff 1979). An equivalent definition is the per-turnover period ratio of the labor value of fixed and circulating capital used in the production process to the labor value advanced for worker consumption. It is estimated (Wolff 1977) by

$$\sigma = \{ \lambda aX\} / \lambda M \quad (6)$$

where X is the column vector of total output by sector. From this definition, one can estimate constant capital C as

$$C = \lambda aX \quad (7).$$

The technical composition of capital—or the capital-labor ratio—is estimated by

$$\tau = paX/M \quad (8)$$

where p is the vector of sectoral price indices. The relationship between the organic and the technical composition of capital is given by

$$\sigma = (\lambda^*_c / \lambda m)\tau \quad (9)$$

where λ^*_c is the average labor content of unit money value of physical capital in constant prices.

$$\lambda^*_c = \lambda aX / paX \quad (10)$$

The value rate of profit can then be estimated from the rate of surplus value ε and the organic composition of capital σ as

$$\pi_V = \varepsilon / (1 + \sigma) \quad (11).$$

In conventional terms, π_V is the ratio of profits to the value of capital stock.

The long-term rate of relative surplus value for a given year k can then be estimated by using the productive consumption data for a base year 0.

$$\varepsilon_{rl} = (1 - \lambda_k m_0) / \lambda_k m_0 \quad (12)$$

The short-term rate of two years can be estimated by using the productive consumption data of the previous year 1 or at least for the year when the data were last available.

$$\varepsilon_{rs} = (1 - \lambda_2 m_1)/\lambda_2 m_1 \quad (13)$$

With the data on worker consumption being constant to either the base year or the previous year, one can then estimate the effects of technical change by the difference in the rates of absolute and relative surplus value. When the rate of relative surplus value is greater than the rate of absolute surplus value, then substantial technical change has been achieved throughout the economy. This would mean that λ has decreased over time. In other words, it is a decrease in labor time to produce the same quantity of output or an increase in labor productivity. This can then be an indicator of the increasing integration of households in the informal or precapitalist sectors to the capitalist sector.

DATA SOURCES[2]

The input-output tables for 1961, 1965, 1969, 1974, 1979, 1983, 1985, 1988, 1990, 1994, 2000, 2006, and 2012 are available with the Philippine Statistical Authority (PSA). The data were obtained from registered establishments for the tables to represent the modern or capitalist sector transactions of the Philippine economy. The informal or precapitalist sector is thus excluded from these data. Given its huge labor supply, the informal sector would in principle manifest itself through the relatively low wage level or standard of living of the working class. This would then appear as a larger rate of surplus value for the Philippines compared to the developed or fully capitalist economies of the US and Puerto Rico, as shown by Venida (2007).

The sectoral price indices per sector were obtained from the NEDA (National Economic and Development Authority) Statistical Yearbook. For consistency, this paper converted the price indices with 1972 as the base year. In the absence of a complete set of sectoral price indices, the data for 2000, 2006, and 2012 were estimated by computing for the ratios of the GNP in current prices to the GNP in constant prices, for the production sectors in the Gross Value-Added (GVA) approach, and for the expenditure sectors. The indices were then estimated with the 1972 data as the base year. The 1983 and 1990 tables were RAS updates. Depreciation data were not estimated for 1983 so that the data for this year were not included.

[2] As an update on empirical estimates, this paper's data sources are the same as the one's I used in my article for Philippine data from 1961–1994. See Venida, "Marxian Categories Empirically Estimated."

The input-output tables with noncompetitive transactions were only available for 1969, 1985, and 1988 so that it was decided to use the competitive transactions tables for all the years for long-term comparability. The resulting calculations for λ would thus tend to overestimate the actual labor values.

Wolff (1977) estimates the organic composition of capital as the ratio of produced inputs plus depreciation to variable capital V advanced per annum. The technical composition of capital is estimated as the ratio of total cost of inputs in 1972 to the total wages. Thus, this model underestimates the actual values for σ and τ because of the lack of data on fixed capital and turnover period. As a consequence, the value rate of profit π_V will be overestimated.

The long-term rate of relative surplus value used the consumption column for the base year 1961 for all the years. The short-run rate of relative surplus value compared two successive input-output years by using the consumption column of the earlier year for both years. In this way the long-run and short-run changes in labor productivity, if any, can be identified.

ANALYSIS OF RESULTS

The rates of surplus value increased steadily from 1961 until 1990, its highest rate at 2.8057, and have been steadily decreasing since to its low of 1.6763 in 2012, a level only slightly higher than the 1979 level of 1.5835. Since surplus value is conventionally the ratio of property income to compensation income, this trend suggests a larger proportion of national income being earned by workers as opposed to property owners, a possible indication of increasing improvement in the distribution of income.

The same pattern can be observed with the long-run and short-run rates of relative surplus value. By 2012, the rate of surplus value has fallen way below the long-run rate of relative surplus value of 1.8145 and the short-run rate of relative surplus value at 1.9486. This was the first year that the rate of absolute surplus value was below the rates of relative surplus value. A higher rate of relative surplus value would mean labor productivity improvements and a decrease in the family wage or the cost of reproduction of labor (Foley 1986). The labor productivity improvements could mean a decrease in the cost of wage goods, which could also result from cheaper imports. Note that by the model, total wage earnings here is equal to the total consumption of the working class. The higher rate of relative surplus value for 2012 suggests that labor productivity improvements

and continued trade liberalization have somewhat decreased the labor time necessary for the production of subsistence goods, as argued by Wolff (1977). This result for the 2000–2012 period also parallels the estimates of Felipe and Estrada (2018) for labor productivity improvements in the manufacturing sector of the Philippines from 2000–2017. As noted above, this would also suggest the increasing integration of households from the informal or precapitalist sector to the capitalist sector.

But the difference in the absolute and relative surplus value is not as substantial as what was recorded by Wolff (1977) for Puerto Rico from 1948 to 1963. During this period, the rate of relative surplus value was higher in Puerto Rico by 318%; in the Philippines, the long-run rate of relative surplus value was higher by just 8.2%; the short-run rate by 16.2% from 2000 to 2012. This would now suggest that the expansion of capitalism to absorb more of the informal, precapitalist sector may not be as rapid as in the case of Puerto Rico.

Table 1. Wolff Puerto Rico Model: Labor Value, Profit Rates, and Related Statistics (in person-years per thousand pesos).

	1961	1965	1969	1974	1979	1985	1988	1990	1994	2000	2006	2012
Rate of surplus value	1.3710	1.2495	1.5261	1.8421	1.5835	1.5707	2.0630	2.8057	2.4305	1.8409	2.1098	1.6763
Long-run rate of relative surplus value	1.3710	1.2248	1.5258	1.7603	1.6350	1.5193	2.0091	2.7805	2.3553	1.8717	1.9514	1.8145
Short-run rate of relative surplus value	1.3710	1.2448	1.5471	1.7873	1.5896	1.4974	2.0695	2.8208	2.3587	1.9380	2.0558	1.9486
Organic composition of capital	1.4802	3.0647	1.9086	2.6399	2.8691	2.7716	2.9043	3.7957	3.8699	2.4399	5.8621	1.0575
Technical composition of capital	1.4479	2.8777	1.8256	2.4813	2.9339	2.4206	2.7863	3.7002	3.4963	2.4029	6.4274	5.2345
Average Labor content of Constant Capital	0.4312	0.4734	0.4139	0.3743	0.3785	0.4454	0.3403	0.2695	0.3227	0.3575	0.2933	0.3386
Compensated labor time λm	0.4218	0.4445	0.3959	0.3518	0.3871	0.3890	0.3265	0.2628	0.2915	0.3520	0.3216	0.3737
Unweighted average of labor values	0.4349	0.4538	0.4102	0.3617	0.3800	0.4212	0.3353	0.2784	0.3291	0.3416	0.3093	0.3414
Value rate of profit	0.5528	0.3074	0.5247	0.5061	0.4093	0.4165	0.5284	0.5850	0.4991	0.6610	0.3075	0.8147
Ratio of surplus to worker consumption	1.0221	1.0832	1.2679	1.0832	1.3587	1.2331	1.4996	1.9181	1.8916	1.0177	1.6594	1.2705
Average Market Rate of Profit	0.5113	0.3028	0.4498	0.4416	0.3231	0.3348	0.4155	0.4879	0.4099	0.3063	0.2518	0.3255

Percentage Changes (%)	61-65	65-69	69-74	74-79	79-85	85-88	88-90	90-94	94-00	00-06	06-12	61-12
Rate of surplus value	-8.86	22.14	20.71	-14.04	-0.80	31.34	36.00	-13.37	-24.26	34.28	-20.55	22.30
Long-run rate of relative surplus value	-10.66	24.58	15.37	-7.12	-7.08	32.24	38.40	-15.29	-20.53	36.53	-7.02	48.15
Short-run rate of relative surplus value	-10.67	26.32	15.53	-11.1	-5.8	38.20	36.31	-16.38	-17.83	58.24	-5.22	NA
Organic composition of capital	107.05	-37.72	38.31	8.68	-3.40	4.79	30.69	1.96	-37.15	140.26	-81.96	-8 8.22
Technical composition of capital	98.75	-36.56	35.91	18.24	-17.50	15.11	32.80	-5.51	-31.55	167.48	-18.56	279.09
Average Labor content of Constant Capital	9.80	-12.58	-9.55	1.12	17.67	-23.60	-20.79	19.70	10.79	-17.09	15.47	-22.03

Compensated labor time λm	5.40	-10.95	-11.12	10.01	0.50	-16.07	-19.51	10.93	20.76	-16.54	16.20	-11.42
Unweighted average of labor values	4.37	-9.63	-11.82	5.05	10.85	-20.39	-16.97	18.22	3.60	1.39	10.38	-21.94
Value rate of profit	-44.39	70.68	-3.54	-19.13	1.76	26.88	10.72	-14.69	-74.39	-53.49	264.94	147.37
Ratio of surplus to worker consumption	5.97	17.06	-14.57	25.44	-9.24	21.61	27.91	-1.38	-46.20	63.05	-23.44	24.30
Average Market Rate of Profit	-40.78	48.54	-1.83	-26.82	3.62	24.09	17.43	-16.00	-25.28	-34.47	29.27	-19.95

The organic and the technical compositions of capital both decreased from 2006 to 2012, after a sharp increase from 2000 to 2006. The organic composition or the capital-output ratio steadily increased from 1969 to 1994 then decreased in 2000. In 2012, it was at its lowest level at 1.0575 since 1961, with the highest level of 5.5621 attained in 2006. The technical composition or the capital-labor ratio increased steadily from 1969 to 1994 then gradually decreased in 2000. At 5.2345, the 2012 level was higher than the 1961 level of 1.4479. Both organic and technical compositions decreased only slightly during the crisis years from 1979 to 1985. It is noteworthy that both the rates of unemployment, underemployment and visible underemployment, declined from 2006 to 2012. The labor productivity improvement as suggested by the higher rate of relative surplus value compared to the rate of absolute surplus value may explain the increase in the technical composition or the higher capital-labor ratio. The level of constant capital increased far more from 2000 to 2006 than it did from 2006 to 2012. This could be due to the decrease in investment in capital during the 2008–2009 Global Financial Crisis. The average labor content of constant capital had not altered substantially, with a generally declining trend from 1961 to 2012.

Table 2. Growth Rates of GNP and GDP, Rates of Unemployment and Underemployment (%)[3]

Year	GNP	GDP	GNP per capita	Unemployment	Visible Underemployment
1961	6.4	5.6	3.4	6.4	NA
1962	5.6	4.8	2.6	6.5	NA
1963	7.0	7.1	4.0	4.6	NA
1964	2.5	3.5	-0.5	6.4	NA
1965	5.2	5.3	2.2	6.2	NA
1966	4.8	4.4	1.8	7.0	NA
1967	5.8	5.3	2.8	7.7	NA
1968	5.2	4.9	2.2	7.9	NA
1969	5.9	4.7	2.9	6.7	NA
1970	5.7	3.8	2.7	NA	NA
1971	6.2	5.4	3.2	5.3	NA
1972	4.2	5.5	1.2	5.4	NA
1973	9.8	8.9	6.8	4.9	NA
1974	4.2	3.6	1.4	4.0	NA
1975	4.9	5.6	2.5	3.9	NA
1976	8.1	8.8	4.8	5.2	NA
1977	5.8	5.6	3.0	5.1	NA
1978	5.5	5.2	2.7	4.9	NA

[3] Data for Table 2 is taken from the Philippine Statistical Authority, World Development Indicators. Take note: Unemployment data for 1956–75 and 1980 onward use "past week" reference period while for 1976–78 use "past quarter" reference period. Prior to 1987, being underemployed was defined as the number of employed persons wanting additional work. From 1987 onwards, the concept was redefined to number of employed persons wanting more hours of work. Visibly, the underemployed are those who want to work more hours but work less than 40 hours per week. No labor force survey was conducted in 1979.

1979	6.4	5.6	3.6	NA	NA
1980	4.6	5.2	1.9	7.9	NA
1981	3.2	3.4	0.7	8.8	NA
1982	2.8	3.6	0.3	9.6	NA
1983	1.4	1.9	-1.0	10.4	NA
1984	-8.7	-7.3	-10.9	10.4	NA
1985	-7.2	-7.3	-9.3	12.5	NA
1986	4.2	3.4	1.7	11.8	NA
1987	5.1	4.3	2.6	11.2	12.5
1988	7.2	6.8	4.7	8.3	11.7
1989	5.7	6.2	3.3	8.4	11.0
1990	4.5	3.0	2.2	8.1	10.5
1991	0.2	-0.6	-2.0	9.0	11.1
1992	0.6	0.3	-1.5	8.6	10.4
1993	2.1	2.1	-0.4	8.9	10.9
1994	5.3	4.4	2.7	8.4	10.6
1995	4.9	4.7	2.4	8.4	10.2
1996	7.2	5.9	4.8	7.4	11.2
1997	5.3	5.2	3.0	7.9	10.7
1998	0.4	-0.6	-1.6	10.1	11.5
1999	3.7	3.4	1.7	9.7	11.7
2000	4.5	4.0	2.5	11.1	11.1
2001	3.7	3.7	1.7	11.2	11.0
2002	4.2	4.4	2.1	10.2	11.1
2003	5.9	4.9	3.7	10.2	10.5

2004	6.7	6.4	4.6	10.9	11.0
2005	5.6	4.9	3.5	7.4	12.6
2006	4.5	5.2	2.6	8.0	13.9
2007	5.8	6.6	4.1	7.3	12.0
2008	4.4	4.2	2.8	7.4	11.8
2009	4.7	1.1	3.0	7.5	11.8
2010	6.9	7.6	5.2	7.4	11.1
2011	2.9	3.7	1.2	7.0	11.7
2012	7.1	6.7	5.4	7.0	11.9
2013	8.2	7.1	6.4	7.1	11.3
2014	5.8	6.1	4.1	6.6	11.3
2015	5.8	6.1	4.4	5.6	9.9
2016	6.7	7.0	5.3	4.7	9.7
2017	6.5	6.7	4.9	5.0	8.6

From 1990 to 2012, the compensated labor time and average unweighted labor values have both increased. Both had decreased steadily from 1961 to 1990. The increase in compensated labor time has been steady from 1990 onwards, with average labor values decreasing from 1994 to 2000 then increasing from then on. The increase in the compensated labor time may suggest that the productivity improvements of labor have been accompanied by increases in real wage. Aglietta (1979) has argued that in the developed or fully capitalist economies, the increase in earnings of the working classes made them into the main markets for the goods produced by domestic manufacturers and this expansion in domestic manufacture ushered in further industrialization and capitalist expansion—a phenomenon Aglietta dubbed “Fordism.” The increase in compensated labor time for the Philippines from 1990 to 2012 could suggest that if this pattern would be maintained in the future, then domestic demand may then be a major source of consumption for domestic production sectors and thus set the stage for a possible Fordism in the economy. But this would simply seem like the early stage in the transition to full capitalism.

The average market rate of profit and the value rate of profit saw sudden increases from 2006 to 2012. These could be due to the improved productivity of labor as argued by Felipe and Estrada (2018) and as also shown by the increase in the rate of relative surplus value. The ratio of surplus to worker consumption increased from 1.0221 in 1961 to 1.2705 in 2012, which was lower than its highest value of 1.9181 in 1990. The average market rate of profit decreased from 0.5113 in 1961 to 0.3255 in 2012. These two seem to suggest an improvement in the worker standard of living compared to the property-owners and again this could be due to improvement in labor productivity since 2000. The value rate of profit increased in the long run, from 0.5528 in 1961 to 0.8147 in 2012. The rates of surplus value have decreased steadily since 1990, which indicates a greater share of workers' labor income in total national income compared to property owners. And the compositions of capital have decreased from 2006 to 2012, again suggesting greater utilization of labor compared to capital. These decreases suggest an incipient expansion of capitalism. The increased profit rates would mean greater investment and competition among capitalists. However, the longer-term trend is still unclear.

The unweighted labor values have decreased from 1961 to 2012 but have steadily increased since 1990. However, upon closer inspection, one would note that twenty-one of the twenty-eight sectors have experienced substantial decreases in labor values from 1961 to 2012. Compensated labor time also showed the same pattern with a definite decrease from 1961 to 2012 but a steady increase from 1990 to 2012. This would suggest an uneven change in labor productivity among the different sectors of the economy. Nonetheless, as Lipietz (1986) pointed out, labor productivity growth allows for increases in both the family wage or the compensation of labor and the profit rates—this seems to be borne out by the data from 2006 to 2012.

The period of 2001 to 2017 is unprecedented in Philippine economic history as it showed uninterrupted growth in the country's GNP. The level of investment has increased steadily. From 2005 onwards, the rates of unemployment and underemployment have fallen steadily to their lowest levels since about 1985. This may explain the substantial decreases in the organic and technical compositions of capital from 2006 to 2012. The long-run and short-run rates of relative surplus value being higher than the rate of surplus value in 2012 suggests an increase in productivity to produce goods for the subsistence of the productive laboring class.

The period from 2006 to 2012 may suggest an incipient phase in the country's long-term development toward capitalism. Although labor productivity has improved from 1961 to 2012 as shown by the decline in labor values, it has been on a somewhat decreasing trend with labor values increasing from 1990 to 2012. The same could be said of compensated labor time. Both in fact substantially increased from 2006 to 2012. The compositions of capital have fallen significantly from 2006 to 2012. After a steady decrease from 1969 to 2006 with a sudden drop in 2000, the organic composition of capital was at its lowest in 2012 at 1.0575. This seems like a dramatic long-term decrease in the utilization of capital per output. The technical composition of capital has shown a steady increase from 1961 to 2006 despite sudden decreases in 1969 and 2000 and a slight decrease in 1985 (these were all crisis years when the economy contracted). In 2012, it decreased to a level of 5.2345, which is still higher for almost all the previous years except 2006. This suggests an increasing utilization of capital relative to labor over the long-run. But as also pointed out previously, the 2012 data may also be due to the recent decrease in investment due to the 2008–2009 Great Financial Crisis.

It seems that capitalist enterprises realized increasing profit rates from the improvements in labor productivity suggested by the higher rate of relative surplus value compared to the rate of absolute surplus value and possibly by overall efficiency in the utilization of capital. Moreover, the liberalization of the economy since the early 1990s would mean a general decrease in the cost of constant capital and the means of subsistence.

Marx has suggested that capitalist competition will involve increasing investment in constant capital and technical change to increase competitiveness of individual firms and further realize greater individual profits. But the expansion in the utilization of capital coupled with improvements in labor productivity can then decrease the rate of profit over time. It remains to be seen if this process will be maintained in the long run. Besides, the increase in compensated labor time from 1990 to 2012 suggests an increase in the real earnings of the entire employed labor force, which suggests the creation of a domestic market—one that can realize a measure of Fordism in the country (Aglietta 1979).

The size of the informal sector has decreased from 45.43% in 1991 to 33.61% in 2012, and up to 28.04% in 2015 (Medina and Schneider 2018). The rate of visible underemployment as shown in Table 2 has only slightly declined from a high of 12.5% in 1987 and 13.9% in 2006 and

has hovered below 12% from 2008 onwards. With much of the surplus coming from the increase in the labor time of family labor, these percentages still suggest a substantial surplus population that can keep the cost of labor's reproduction quite low as argued in Venida (2011). The increase in the rate of relative surplus value from 2006 to 2012 is a novel development since 1961 and this bears watching if the expansion of the capitalist sector to absorb more of the semi-feudal or precapitalist sector can be maintained in the future. One can also note the fact that the growth in the population has declined so that in the very long-term, the increase in the labor force will be slower. These would suggest a possible decline in the informal or precapitalist sector and a decrease in the social disarticulation of the society (de Janvry and Sadoulet 1983).

Table 3. Population Census Data for the Philippines[4]

Year	Population	Growth rate (%)
1960	27,087,685	2.89
1970	36,684,486	3.08
1975	42,070,660	2.78
1980	48,098,460	2.71
1990	60,703,206	2.35
1995	68,616,536	2.32
2000	76,504,077	2.36
2007	88,548,366	1.90
2010	92,337,852	1.72
2015	100,981,837	1.84

Felipe and Estrada (2018) have pointed out that there have been substantial labor productivity improvements. They've noted that this was specially the case with the manufacturing sector. As confirmed by Clarete, Esguerra, and Hill (2018), they also point out the substantial portion of the output and employment that has been generated in the service sector. The transition to capitalism was realized through industrialization (Warren 1973) and the increase in the employment of productive labor. De Janvry and Sadoulet (1983) further argue that a condition of long-term expansion of the capitalist economy is equitable growth that can be hampered by the nature of a socially disarticulated economy. One will note that although income inequality has

[4] Data for Table 3 is taken from the Philippine Statistical Authority, Manila, Philippines.

persisted in the latest available data, the Gini ratio has decreased to its lowest level in 2015 when the income shares of the middle and lower deciles have also improved. This can be the basis of the increase in domestic demand that can fuel the expansion of the domestic manufacturing sectors—a case for the longer-term. It therefore remains to be seen whether this capitalist industrialization will still proceed steadily in the Philippines.

Table 4. Income Distribution of Families in the Philippines (%)[5]

Decile Group	1985	1988	1991	1994	1997	2000	2003	2006	2009	2012	2015
First	2.0	2.0	1.8	1.9	1.7	1.7	1.8	1.9	2.0	2.9	3.2
Second	3.2	3.2	2.9	3.0	2.7	2.7	2.9	2.9	3.1	3.9	4.3
Third	4.1	4.1	3.7	3.9	3.4	3.5	3.8	3.8	3.9	4.6	5.0
Fourth	5.0	5.0	4.6	4.9	4.3	4.4	4.7	4.7	4.8	5.5	5.9
Fifth	6.0	6.0	5.6	6.0	5.3	5.5	5.8	5.8	5.0	6.5	6.8
Sixth	7.3	7.3	6.9	7.4	6.7	6.9	7.2	7.2	7.3	7.8	8.2
Seventh	8.9	9.1	8.7	9.1	8.6	8.8	9.1	9.1	9.2	9.7	9.7
Eighth	11.4	11.6	11.3	11.8	11.4	11.7	11.9	11.9	11.9	12.2	12.0
Ninth	15.7	16.0	16.0	16.4	16.1	16.4	16.6	16.9	16.6	16.3	15.6
Tenth	36.4	35.8	38.6	35.5	39.7	38.4	36.3	36.0	35.3	30.5	29.5
Gini coefficient	0.447	0.445	0.468	0.451	0.496	0.482	0.461	0.458	0.464	0.461	0.444

[5] Sources for the data in Table 4: for the income distribution data and for the Gini coefficients 1994–2003 see National Statistics Office; for the Gini coefficients of 1985–91 see Ponciano Intal and Ma. Cynthia Bantilan, 1994, *Understanding Poverty and Inequality in the Philippines: A Compendium of Policy and Methodological Researches* (Manila: NEDA); and for the 2006–2015 data see the Philippine Statistical Authority.

SUMMARY AND CONCLUSIONS

The steady uninterrupted growth in Philippine GNI and GDP from 2000 to 2018 has been the longest period of continuous economic expansion in the country since World War II. Poverty rates have remained quite substantial but have decreased. The degree of income inequality as shown in the Gini ratios have remained in the same range of 0.44 but have also shown a slight decrease. The size of the informal sector and visible underemployment have also decreased from 2010 onwards. The growth rate in population has also decreased. These would seem to indicate the beginnings of a long-term shift toward greater capitalist expansion through the absorption of the precapitalist informal sector.

Marxian theory has been regarded as the synthesis of classical economic theory that was largely focused on long-term change or economic development (Blaug 1997). The conceptual framework incorporates the issue of equity in the distribution of income as measured by surplus value—the ratio of property income to compensation income or worker wages. The difference between absolute and relative surplus value identifies the source of surplus value by either extending the working time or improvements in labor productivity. The extension of the working time or working day can be realized by the presence of a large surplus population in the informal or precapitalist sector (de Janvry 1981).

The Wolff (1977, 1979) operationalization of the Marxian model has provided estimates for the increase in labor productivity since 2006, which is consistent with what were estimated by Felipe and Estrada (2018) as well as Clarete, Esguerra, and Hill (2018). Although, the productivity gains from 2000 to 2012 for the Philippines may not yet be quite as substantial compared to the one experienced by Puerto Rico (Wolff 1977) from 1948 to 1963. Much of the growth of the Philippine economy has been concentrated in the service sector, a largely unproductive sector. But productivity gains have been estimated for the manufacturing sector as noted by Felipe and Estrada (2018) and as shown by the decrease in labor values in the manufacturing sector. The decrease in the growth of over-all population (as shown in Table 3) may suggest that in the medium-term the production of surplus can still rely on the increase in absolute surplus value; but in the long-run this will have to be through improved productivity gains and thus through relative surplus value. The increase in compensated labor time also suggests the development of domestic demand, which can have an expansionary effect on domestic production. Although the degree of income inequality

has persisted in the range of a Gini of 0.4 since 1985, it has somewhat decreased in 2015 with greater income shares of the middle and lower deciles (as shown in Table 4). This can mean the development of domestic demand as the source of long-term growth and expansion of the local manufacturing sectors (de Janvry and Sadoulet 1983).

This however could be realized through industrial expansion. Fabella and Daway-Ducanes (2015) have pointed out that even with the continued expansion of the Philippine economy since 2000 the service sector has dominated the share of total employment and output—a structure more common among the developed industrialized economies. Therefore, the expansion of the economy was largely due to the service sector, with unproductive labor being a great contributor. Fully capitalist economies would have an efficient, technologically advance industrial sector that employed productive labor and thus allowed for greater surplus creation. In short, there would be more funds for further investment. But as argued by Fabella and Daway-Ducanes (2015), given mobile international capital flows, this would suggest a deliberate state implementation of industrial policy. The results of Felipe and Estrada (2018) and this paper show the beginnings of labor productivity improvements in the industrial sector; but this might need deliberate state intervention to realize industrial development.

Marxian theory incorporates the role of social classes in the economy, which is not incorporated in mainstream economic analysis (Blaug 1997). Behavior of social classes can determine the economy's ability to produce and reinvest surplus in capital accumulation and labor productivity (Wolff 1987). Thus, analyzing social classes is important to identify the possibilities for long-term change. In traditional Marxian theory, the bourgeoisie (the industrialists) by their nature engage in market competition so that by their nature they would reinvest their surplus in technological improvements and in worker efficiency; they would also support government investments in infrastructure and social services as these contribute to greater business competitiveness. In contrast, the feudal landed aristocracy tended to focus on maintaining and enhancing their political fortunes so that they tended to channel their earnings from business activities toward their political activities, a decidedly unproductive utilization of surplus.

Neo-Marxian theory posits that developing economies like the Philippines are dualistic or socially disarticulated—characterized by coexisting capitalist and feudal structures as well as a large informal or precapitalist sector with a surplus population (de Janvry 1981; Venida 2000,

2007). The speed toward capitalist expansion (and what de Janvry calls social articulation) will be largely due to whichever social class becomes dominant in the country's political economy and the size of the surplus population. The bourgeoisie tend to support state policies toward infrastructure development and expansion of education, health care facilities, and housing for the low- and middle-income classes. These expenditures enhance the competitiveness of business, especially industrial enterprises. Moreover, the expansion of industry creates high-productivity jobs for skilled workers who, by their higher earnings, can then become the market for the products of the industrial sector (Aglietta 1979). It is through this capitalist expansion that a measure of equitable growth can be attained (de Janvry and Sadoulet 1983; Clarete, Esguerra, and Hill 2018).

Venida (2000) has noted that the transition of the Philippines toward full capitalism would be delayed by the strong presence of the landed aristocracy. Based on the argument of de Janvry (1981), the landed aristocracy in power could mean a general tendency for governmental resources and policies to favor investment of the social surplus in more unproductive activities (such as the military, the police, increasing bureaucratization, and employment). In the Philippines, elements of the traditional landed aristocracy have diversified their investments even moving toward finance (Hutchcroft 1998; Krinks 2002). Recent studies (Mendoza et al. 2012) have noted the dominance of family political dynasties in the national Congress, including their relationships with officials in local government since the 1990s. They will remain a force in delaying the Philippine economy's transition to full social articulation or a fully developed capitalism (Raquiza 2014).

Nonetheless, the results of the input-output analyses suggest possible indicators of the move toward greater social articulation or capitalist expansion. Relative surplus value has dominated from 2006 to 2012 despite its modest growth. This contrasts the results from Venida (2011) where absolute and relative surplus value did not vary much from 1961 to 2000. The size of the informal sector has begun to diminish, and the population has begun to grow at a slower rate. But to attain further industrial growth and greater equity in the distribution of income, state policy will need to implement industrial development policies and investment in infrastructure and social welfare. This last issue will be a fascinating element in analyzing which class of leaders will be dominant in the political economy of the country.

References

Aglietta, Michel. 1979. *A Theory of Capitalist Regulation: The US Experience*. London: New Left Books.

Beja, Edsel. 2006. Capital Flight and the Hollowing Out of the Philippine Economy in the Neoliberal Regime. *Kasarinlan: Philippine Journal of Third World Studies* 21(1):55–74.

Blaug, Mark. 1997. *Economic Theory in Retrospect*. 5th edition. United Kingdom: Cambridge University Press.

Clarete, Ramon. "Economic Growth and Poverty Reduction." In *The Philippine Economy: No Longer the East Asian Exception?* Edited by Ramon Clarete, Emmanuel Esguerra, Hal Hill, 53–111. Singapore: ISEAS Publishing.

Clarete, Ramon, Emmanuel Esguerra, and Hal Hill, eds. 2018. "The Philippine Economy: An Overview." In *The Philippine Economy: No Longer the East Asian Exception?*, 1–52. Singapore: ISEAS Publishing.

Fabella, Raul and Sarah Lynne Daway-Ducanes. 2015. "Development Progeria: The Role of Institutions and the Exchange Rate." *Philippine Review of Economics* 52 (2): 84–99.

Felipe, Jesus and Gemma Estrada. 2018. "Why Has the Philippine Growth Performance Improved? From Disappointment to promising Success." *ADB Economics Working Paper Series No. 542*. Manila: Asian Development Bank.

Foley, Duncan. 1986. *Understanding Capital: Marx's Economic Theory.* United States of America: Harvard University Press.

Hutchcroft, Paul. 1998. *Booty Capitalism: The Politics of Banking in the Philippines*. Ithaca: Cornell University Press.

de Janvry, Alain. 1981. *The Agrarian Question and Reformism in Latin America*. Baltimore and London: The Johns Hopkins University Press.

de Janvry, Alain and Elisabeth Sadoulet. 1983. "Social Articulation as a Condition for Equitable Growth." *Journal of Development Economics* 13 (3): 275–303.

Krinks, Peter. 2002. *The Economy of the Philippines: Elites, Inequalities and Economic Restructuring*. London: Routledge, Taylor and Francis Group.

Laibman, David. 1999. "Productive and Unproductive Labor: A Comment." *Review of Radical Political Economics* 31 (2): 61–73.

Lipietz, Alain. 1986. "Behind the Crisis: The Exhaustion of a Regime of Accumulation. A 'Regulation School' Perspective on Some French Works." *Review of Radical Political Economics*. 18 (1–2): 13–32.

Marx, Karl. (1967) 1979. *Capital: A Critique of Political Economy.* 3 vols. Edited by Frederick Engels. New York: International Publishers. Ninth printing.

Medalla, Erlinda, Gwendolyn Tecson, Romeo Bautista, and John Power. 1996. *Catching Up with Asia's Tigers: Philippine Trade and Industrial Policies.* 2 vols. Manila: Philippine Institute of Development Studies.

Medina, Leandro and Friedrich Schneider. 2018. "Shadow Economies Around the World: What Did We Learn over the Last 20 Years?" *IMF Working Paper WP/18/17*. Washington DC: International Monetary Fund.

Mendoza, Ronald, Edsel Beja, Victor Venida, and David Yap. 2012. "Inequality in Democracy: Insights from an Empirical Analysis of Political Dynasties in the 15th Philippine Congress." *Philippine Political Science Journal* 33 (2): 132–145.

Myint, Hla. 1985. “Organizational Dualism and Economic Development.” *Asian Development Review* 3 (1): 24–42.

Philippine Statistical Authority. 1969, 1974, 1979, 1983, 1985, 1988, 1994, 2000, 2006, 2012. *The Inter-industry Accounts of the Philippines.* Manila: National Economic and Development Authority.

Picchio, Antonella. 1992. *Social Reproduction: The Political Economy of the Labor Market*. Great Britain: Cambridge University Press.

Raquiza, Antoinette. 2014. “Changing Configuration of Philippine Capitalism.” *Philippine Political Science Journal* 35 (2): 225–250.

Reyes, Celia and Edwin del Valle. 2002. “Poverty Alleviation and Equity Promotion.” In *The Philippines Beyond 2000: An Economic Assessment*, edited by Josef Yap, 489–548. Manila: Philippine Institute of Development Studies.

Serafica, Ramonette. 2002. “An Assessment of Infrastructure Policies.” In *The Philippines Beyond 2000: An Economic Assessment*, edited by Josef Yap, 395–438. Manila: Philippine Institute of Development Studies.

Smith, Adam. 1976. *The Wealth of Nations*. Edited by Edwin Cannan. Chicago: The University of Chicago Press.

Todaro, Michael. 2000. *Economic Development.* 5th Edition. New York: Longman Inc.

Venida, Victor. 2000. “The Economic Theory of Globalization.” *Philippine Studies: Historical Ethnographic Viewpoints* 48 (4): 488–522.

———. 2007. “Marxian Categories Empirically Estimated: The Philippines, 1961–1994.” *Review of Radical Political Economics* 39 (1): 58–79.

———. 2011. “Absolute and Relative Surplus Value: the Philippines 1961–2000.” *Journal of Social Transformation*. 1 (1): 109–130.

Warren, Bill. 1973. “Imperialism and Capitalist Industrialization.” *The New Left Review* 81 (September-October): 3–44.

Wolff, Edward. 1977. “Capitalist Development, Surplus Value, and Reproduction: An Empirical Examination of Puerto Rico.” In *The Subtle Anatomy of Capitalism*, edited by Jesse Schwartz, 140–149. Santa Monica, CA: Goodyear Publishing Co., Inc.

———. 1979. “The Rate of Surplus Value, the Organic Composition and the General Rate of Profit in the US Economy, 1947–67.” *American Economic Review* 69 (3): 329–341.

———. 1987. *Growth, Accumulation, and Unproductive Activity: An Analysis of the Postwar U.S. Economy.* United States of America: Cambridge University Press.