What's Happened to Poverty and Inequality in Indonesia over Half a Century?

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Indonesia has achieved moderately fast economic growth for most of the past 50 years. Has this growth translated into rising living standards? This is the question that is addressed in this paper. The conclusion is a qualified yes. The caveat is attached for two reasons: (i) philosophically, the definition of living standards remains a subject of considerable conjecture, and (ii) not all social indicators point in the same direction. I focus primarily on trends in measurable indicators of human welfare, particularly poverty and inequality. Combined with major improvements in the coverage and quality of the country's statistics, and a now extensive literature, it is possible to document, and in some cases explain, trends in living standards in some detail. I also investigate whether (and how) the sudden swing during 1999–2001 from an authoritarian and centralized regime to a democratic and decentralized era impacted significantly on these trends.

Keywords: growth–poverty elasticity, Indonesia, inequality, poverty
JEL codes: I32, I38, O53

I. Introduction

Indonesia has achieved moderately fast economic growth for most of the past 50 years. Have living standards risen commensurately? The purpose of this paper is to survey, analyze, and interpret trends in poverty and inequality over this period. I also explore some broader analytical and policy lessons from the Indonesian experience. The latter question is relevant, as particular aspects of Indonesia's political economy, policy orientations, and geography have broader relevance. The country is the fourth-most populous in the world. It is also the largest archipelagic state in the world, featuring enormous ecological, economic, social, and demographic diversity. Over the past half century, it has had two distinct political regimes: the authoritarian and centralized Soeharto period (1966–1998), followed by the democratic and decentralized period since 1999. The country is

also a resource-rich economy and therefore has experienced episodes of commodity booms and busts. For these reasons, the Indonesian experience has broader lessons for the study of living standards in developing countries.

The motivation for studying this topic is straightforward. As Nobel Laureate Angus Deaton (2013, 23) put it, "[t]he greatest escape in human history is the escape from poverty and death." Yet, as one of the world's leading poverty analysts lamented, "[t]he teaching of economics seems to have become strangely divorced from its applications to real world problems such as poverty" (Ravallion 2016, xxiii).

The earlier "East Asian style" of economic development provides clear analytical guidance on the drivers of both rapid growth and improved living standards. That is, there was a political commitment to economic growth and the policies required to achieve it, including (in one form or another) economic openness, prudent macroeconomic management, rule of law, a stable commercial environment, and broad-based investments in education and infrastructure. The impact of this rapid growth in living standards was further enhanced by three sets of factors: (i) growth that was labor intensive and therefore inclusive (in turn, driven by openness that enabled countries to exploit their comparative advantage); (ii) relatively equitable distributions of wealth and income at the outset of rapid economic growth, partly by design, partly by accident; and (iii) reasonably effective if blunt social policies that equipped almost all the workforce with the requisite skills to participate in the growth process.[1]

At the beginning of the period of study in the mid-1960s, Indonesia was an extremely poor country. The economy had been stagnating for much of the previous half century, poverty and malnutrition were widespread, average life expectancy was less than 50 years, and infant mortality was shockingly high. A nutritional expert made the following observation: "The greater parts of Java and Nusa Tenggara, accounting between them for 70 per cent of Indonesia's total population, must be regarded as malnutrition areas. The regions whose condition is fairly satisfactory are the minority, only 30 per cent" (Napitupulu 1968, 69).

Serious quantitative research on living standards in the then Netherlands East Indies began in the early 20th century.[2] The findings highlighted the extremely low living standards for the vast majority of the population, alongside the highly segmented nature of colonial society. Assessing a range of data, Van Zanden and Marks (2012, 119) analyzed historical living standards based on studies of real wages, heights, inequality, and numeracy. They concluded that "[t]here is little evidence that colonial rule in the long run brought about a real improvement in

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[1] For a broad overview of East Asian economic and social development, see World Bank (1993) and Perkins (2013).

[2] One study stretching back earlier is Baten, Stegl, and van der Eng (2013), who used four sets of anthropometric data to construct time series for human heights over the period 1770–2000 as a proxy for biological living standards. The major conclusion was that there was general improvement after independence in 1945.

the standard of living of the Indonesian population." They also found that "peasants had […] not profited from agricultural modernization; their living standards had remained the same at best, and the gains of growth had gone to the Chinese merchants and the Dutch capitalists."

During the first 2 decades of slow growth after independence in 1945, the evidence on living standards is mixed. It is unlikely that there were any significant inroads made on poverty. There was also little if any improvement in nutrition levels. According to the first national household socioeconomic surveys in 1963/64, known as *Survei Sosio-Ekonomi Nasional* (Susenas), 61% of households in Java fell below the very modest "Sajogyo" poverty lines—so named after its inventor, Professor Sajogyo—of 20 or 30 kilograms of monthly per capita rice consumption for rural and urban areas, respectively (Booth 2016).

From the late 1960s, the economy began to grow quickly at a rate that was sustained for most of the following 5 decades. Combined with major improvements in the coverage and quality of the country's statistics, and a now extensive literature, it is possible to document, and in some cases explain, the trends in living standards in detail. In section II, I examine trends and determinants of poverty. In section III, I investigate inequality, including the government's emerging social policy initiatives. Section IV sums up the findings. My major conclusion is a positive one: poverty has declined quickly in response to accelerated economic growth. However, inequality has risen significantly for much of the past quarter century. As a result, poverty has become less responsive to growth, which has slowed since the late 1990s. The government has also begun to establish a rudimentary social welfare net, but in other respects, the effects of various policy interventions have been mixed.

II. Poverty

In principle, the measurement of poverty is relatively straightforward.[3] It involves, first, establishing a poverty line (i.e., a numerical value that constitutes an agreed minimum acceptable standard of living). The next step is to measure the poverty incidence, typically the head count poverty rate, or the percentage of individuals whose measured consumption falls below the line. This, in turn, requires accurate expenditure and, desirably, income data.

However, translating these broad principles into empirically accurate, robust, and credible estimates includes at least the following dimensions:[4]

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[3]There is a large literature on poverty in Indonesia which I draw upon in this section. Manning and Sumarto (2011) is the key volume on the first decade after the 1997/98 Asian financial crisis. Priebe (2014) provides a detailed methodological review of the Susenas data since 1984. In addition to the references cited in the text, notable contributions include Balisacan, Pernia, and Asra (2003); Booth (2016, 2019); Manning and Miranti (2015); De Silva and Sumarto (2014); Sumner and Edward (2014); and several World Bank publications that are listed in the references.

[4]See Deaton (2013) and Ravallion (2016) for comprehensive analyses of these issues.

(i)   What poverty line should be used?

(ii)   Is poverty estimated as a single numeric (head count) value, or should other measures be used?[5] In practice these measures generally move closely together.

(iii) How much mobility or "churning" is there (i.e., people moving above and below the poverty line over time)?

(iv)   In converting the monetary expenditure into food and other subsistence requirements, what prices should be used, and should these prices vary across socioeconomic class and location?

(v)   Where data are collected at the household level (as is typically the case), what about intrahousehold allocations, especially in the (majority) case of male-headed households?

(vi)   What adjustments should be made for specific personal circumstances such as individual family needs (specialized health requirements), local environmental factors, and extreme events (incidence of natural disasters)?

(vii) Are nonmonetary indicators of well-being relevant, and if so, which ones should be used?

(viii) Are the data consistent, reliable, and credible?

A.   A First Look at Poverty in Indonesia

I rely mainly on the poverty estimates calculated by the Indonesian statistical agency, *Badan Pusat Statistik* (BPS). BPS has constructed a poverty line based on what it considers to be an individual's minimum basic needs. Its poverty line is the sum of food and nonfood items. The food poverty line is currently the expenditure required to obtain 2,100 kilocalories per capita per day, spread across 52 different food types. The nonfood poverty line covers mainly housing, clothing, education, and health. The data are collected in a twice-yearly Susenas household survey.[6]

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[5]The most widely used additional indicator is the poverty gap index, sometimes referred to as the intensity of poverty. It is defined as the gap between the mean consumption (or income) of the poor and the poverty line as a ratio of the poverty line.

[6]In March every year, Susenas surveys 300,000 households, while in September, it surveys 75,000 households. Both samples are randomly selected from 34 provinces and 514 districts. The March surveys are therefore more comprehensive and used for subnational estimates. The collection months have varied somewhat over time,

The BPS approach to poverty measurement and estimation has, in principle, been consistent throughout this period. However, there have been frequent changes in measurement and basket composition, such that Priebe (2014, 201) observes, "only since 2007 has BPS's poverty measurement been relatively consistent and comparable over time."

Table 1 presents the official BPS head count poverty estimates for the period 1970–2018—that is, the number and percentage of the population with estimated consumption below various poverty lines. The first three columns show the number of people below the BPS poverty line, disaggregated into urban and rural areas. The next three columns express these numbers as a percentage of the relevant population. Columns 7 and 8 record the rupiah value of the monthly poverty line. Columns 9–10 compute the poverty percentages for the two current daily international (World Bank) poverty lines, broadly corresponding to that for low-($1.9 per day) and lower-middle- ($3.2 per day) income economies, all expressed in purchasing power parity (PPP) at 2011 prices.[7] The 1970 data are incomplete, reflecting the fact that the Susenas data collection was at an embryonic stage, while estimates according to the international poverty lines are only available from 1984 onward.[8]

Several conclusions can be drawn from this large body of data. Examining the trends over time, there has clearly been a dramatic decline in poverty incidence from 60% to just under 10% over nearly half a century. In fact, the decline is even greater since BPS introduced a higher poverty line in 1996 and 1998. A crude splicing of the data—that is, assuming a similar consumption distribution for the two poverty lines—would suggest that the 2018 figure according to the original poverty line would probably be about 7%. This is my major general conclusion: that Indonesia has been highly successful in reducing the poverty of its citizenry. None of the caveats, doubts, and qualifications discussed below fundamentally alter this conclusion.

Several additional observations are relevant. First, the number of poor people has declined more slowly than the percentage for the obvious reason that Indonesia's total population has been increasing. The absolute numbers have also declined more slowly in years when economic growth has been slower and/or income inequality has increased. Apart from the special case of the 1997/98 Asian financial crisis,

but in almost all years, there has been a survey in one of the first 3 months of the year. Table 3 in Priebe (2014) also documents the Susenas sample size and the number of food and nonfood items in the Susenas module. The BPS attempts to adjust for regional price differences in its poverty estimates. I am not aware of any independent verification of these adjustments, but BPS is certainly aware of the importance of the issue.

[7]See World Bank. PovcalNet. http://iresearch.worldbank.org/PovcalNet/introduction.aspx (accessed May 15, 2019).

[8]The data from before 1976 are incomplete and for all intents and purposes unavailable at the subnational level. Booth (1992) and others have shown, on the basis of fragmentary but plausible evidence, that there was a significant decline in poverty incidence in the decade prior to the mid-1970s.

Table 1. Poverty in Indonesia, 1970–2018

Year	Number in Poverty (Million)			% of Population			Poverty Line (Per capita, LCY, monthly)		% of Population ($1.9 per day at PPP)	% of Population ($3.2 per day at PPP)
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural		
1970			70			60				
1976	10	44.2	54.2	38.8	40.4	40.1	4,522	2,849		
1978	8.3	38.9	47.2	30.8	33.4	33.3	4,969	2,981		
1980	9.5	32.8	42.3	29	28.4	28.6	6,831	4,449		
1981	9.3	31.3	40.6	28.1	26.5	26.9	9,777	5,877		
1984	9.3	25.7	35	23.1	21.2	21.6	13,731	7,746	71.4	91.7
1987	9.7	20.3	30	20.1	16.1	17.4	17,381	10,294	71.4	92.7
1990	9.4	17.8	27.2	16.8	14.3	15.1	20,614	13,295	58.8	87
1993	8.7	17.2	25.9	13.4	13.8	13.7	27,905	18,244	58.5	86.6
1996	7.2	15.3	22.5	9.7	12.3	11.3	38,246	27,413		
1996	9.42	24.59	34.01	13.39	19.78	17.47	42,032	31,366	47.4	79.7
1998	17.6	31.9	49.5	21.92	25.72	24.2	96,959	72,780	66.7	90.2
1999	15.64	32.33	47.97	19.41	26.03	23.43	92,409	74,272	41.7	80.1
2000	12.31	26.43	38.74	14.6	22.38	19.14	91,632	73,648	39.3	79.9
2001	8.6	29.27	37.87	9.79	24.84	18.41	100,011	80,382	35.5	77.6
2002	13.32	25.08	38.39	14.46	21.1	18.2	130,499	96,512	22.8	65
2003	12.26	25.08	37.34	13.57	20.23	17.42	138,803	105,888	22.6	62.7
2004	11.37	24.78	36.15	12.13	20.11	16.66	143,455	108,725	23.9	62.9
2005	12.4	22.7	35.1	11.68	19.98	15.97	165,565	117,365	21.1	61.3
2006	14.49	24.81	39.3	13.47	21.81	17.75	174,290	130,584	27.4	65.7
2007	13.56	23.61	37.17	12.52	20.37	16.58	187,942	146,837	22.4	58.4
2008	12.77	22.19	34.96	11.65	18.93	15.42	204,896	161,831	21.8	57.3
2009	11.91	20.62	32.53	10.72	17.35	14.15	222,123	179,835	18.2	54.7
2010	11.1	19.93	31.02	9.87	16.56	13.33	232,989	192,354	15.7	48.1
March 2011	11.05	18.97	30.02	9.23	15.72	12.49	253,016	213,395	13.3	45.1
Sep-11	10.95	18.94	29.89	9.09	15.59	12.36	263,594	223,181		
March 2012	10.65	18.49	29.13	8.78	15.12	11.96	267,408	229,226		
Sep-12	10.51	18.09	28.59	8.6	14.7	11.66	277,382	240,441	11.6	43.3

Continued.

Table 1. *Continued.*

Year	Number in Poverty (Million)			% of Population			Poverty Line (Per capita, LCY, monthly)		% of Population ($1.9 per day at PPP)	% of Population ($3.2 per day at PPP)
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural		
March 2013	10.33	17.74	28.07	8.39	14.32	11.37	289,042	253,273		
Sep-13	10.63	17.92	28.55	8.52	14.42	11.47	308,826	275,779	9.4	40.8
March 2014	10.51	17.77	28.28	8.34	14.17	11.25	318,514	286,097		
Sep-14	10.36	17.37	27.73	8.16	13.76	10.96	326,853	296,681	7.9	37.9
March 2015	10.65	17.94	28.59	8.29	14.21	11.22	342,541	317,881		
Sep-15	10.62	17.89	28.51	8.22	14.09	11.13	356,378	333,034	7.2	33.1
March 2016	10.34	17.67	28.01	7.79	14.11	10.86	364,527	343,647		
Sep-16	10.49	17.28	27.76	7.73	13.96	10.7	372,114	350,420	6.5	31
March 2017	10.67	17.1	27.77	7.72	13.93	10.64	385,621	361,496		
Sep-17	10.27	16.31	26.58	7.26	13.47	10.12	400,995	370,910	5.7	27.3
March 2018	10.14	15.81	25.95	7.02	13.20	9.82	415,614	383,908		

LCY = local currency, PPP = purchasing power parity.
Source: Badan Pusat Statistik estimates (Unpublished).

there have been a few cases when the absolute numbers have increased slightly (e.g., 2002 and 2006).

Second, there are two poverty series. This is because in 1996 and 1998, the official poverty line was revised upward and hence, the official poverty numbers also increased by about 50%.[9] Of course, the actual incidence of poverty remained unchanged. This highlights the fact that poverty lines need to be developed with reference to what are considered to be acceptable community norms concerning a "decent" living standard. A poverty line suited to the Indonesia of the 1960s, characterized by very widespread destitution, was not suitable for the middle-income Indonesia of 1996, when per capita incomes had risen more than fourfold. In the presence of rising incomes, these upward revisions need to be undertaken on an intermittent basis. However, for intertemporal comparisons, poverty lines need to be consistently defined. Ideally, poverty estimates would be available for all lines and for all periods. Alternatively, at least there should be overlapping poverty estimates for the years in which the revisions occur (as the BPS estimates do in Table 1), so that a longer-term spliced series can be constructed.

The revision of poverty lines also draws attention to the broader issue of absolute versus relative poverty. That is, should poverty be defined as the former, according to some definition of minimum human needs that the community deems acceptable? Or should it be a relative measure defined with reference to the community's average living standards? For example, a common (albeit arbitrary) approach is to define the poverty line as equivalent to two-thirds of the average income. Relative poverty therefore becomes a question of inequality, which I examine in the following section.[10]

A third observation is that for each year, there is a wide range of poverty estimates. I examine this in more detail in the next section, but I note here the rural–urban dimensions. As columns 4 and 5 show, both poverty series have fallen sharply. Numerically of course, as Warr (2015) and others argue, the major reduction in absolute poverty has been in rural areas since that is where the largest number of poor people reside. According to the estimates in Table 1, rural and urban poverty incidence were broadly similar prior to 1996. However, since 2000, recorded rural poverty has been significantly higher, generally by at least 50% and sometimes higher still. The recorded differences for the earlier period are thought to

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[9]Priebe (2014) documents these changes, including a broadening of the basket of goods to include more expensive food and nonfood items. BPS poverty overlap series have been published for both 1996 and 1998. The latter was such an atypical year (i.e., hyperinflation and a deep economic crisis) that the overlap year presented here is for 1996.

[10]The most ambitious long-term estimates of poverty and inequality were made by Van Leeuwen and Foldvari (2016), extending over the period 1932–2006 and based on expenditure and population shares for six urban and four rural household categories (and employing social accounting matrices from 1975). They convert the groups into expenditure averages and then estimate poverty on the basis of a poverty line defined as 50% of the median income. In effect, they generate relative poverty (or distribution) numbers. Their results (Table 6) more or less accord with a priori expectations: poverty is found to be rising from 1932 to 1959, then falling quite quickly before rising again in the 1990s under the impact of the 1997/98 Asian financial crisis.

be due to incorrect costings of the nonfood basket in urban areas.[11] In any case, the rural–urban distinctions are often blurred, especially in densely populated regions like Java and Bali where there is extensive commuter and circular migration.

Fourth, the data clearly show that growth really matters, but also that it is not the only determining factor. From Table 1, it is clear that changes in the poverty incidence in Indonesia have followed economic growth quite closely, particularly in the 1970s and 1980s. Conversely, the one major increase in poverty occurred, not surprisingly, during the 1997/98 Asian financial crisis, when the poverty incidence rose by more than one-third. Poverty then fell fairly quickly as growth resumed, such that the head count poverty figure returned to the precrisis rate shortly after per capita income caught up to the precrisis level. Table 1 also illustrates that there is not an exact one-to-one correspondence between growth and the change in poverty. For example, there are instances of small increases in poverty even when gross domestic product (GDP) growth is positive (e.g., 2006/07). These occurrences are typically the result of movements in the prices of goods and services that are significant items in the budgets of the poor and near poor. In 2006/07, for example, it was rising food and petroleum prices, both the result of global price changes that passed through to Indonesian consumers.[12]

A fifth observation is that these are national average statistics. In a huge and diverse country like Indonesia, it is just as important to explore subnational patterns. In fact, almost all regions have enjoyed falling poverty, but the rate of decline has been quite uneven, depending on regional economic growth and employment, and other local factors, including local conflict and natural disasters (Ilmma and Wai-Poi 2014). There are two major exceptions to this conclusion of generalized declines in poverty. The first is the two Papua provinces, where uniquely complex development challenges have resulted in rising poverty incidence even though economic growth has been positive (Resosudarmo et al. 2014). The second was during the 1997/98 Asian financial crisis, when there were large subnational variations in the effects on economic activity and living standards. In particular, Jakarta and West Java, with their larger modern services and manufacturing sectors, experienced a greater economic decline than several of the agricultural exporting regions off-Java, which benefited from the large rupiah depreciation. These differences are also reflected in the larger proportionate increase in urban poverty during the 1997/98 Asian financial crisis, as shown in columns 4 and 5 of Table 1.

Sixth, there is extensive econometric and qualitative literature that examines the characteristics of households that fall below the poverty line and the mobility

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[11]See Priebe (2014) and an earlier paper on the subject by Ravallion and Huppi (1991).
[12]Arianto Patunru (2019 and earlier papers) has drawn attention to the government's interventions in the key sectors of petroleum and rice, and their equity implications. The restrictions on rice imports have increased domestic prices and hence poverty incidence. The petroleum subsidies have increased inequality since higher income groups benefit disproportionately.

of these poor households.[13] Education of the household head consistently emerges as the most important determinant. Other factors include household size, household assets (wealth), the employment status and sector of the household head, health status, and location (urban or rural). Poverty incidence is also significantly higher among the elderly (Priebe 2017). Perhaps surprisingly, being a female-headed household does not appear to be a major factor, perhaps in part because there are relatively few of them.

Finally, it is readily apparent just from visual inspection that poverty has been declining more slowly since around 2000. Is it because economic growth has been slower, or because poverty has become less responsive to growth? I examine this issue below by computing poverty–growth elasticities.

## B.   Different Lines, Different Poverty Estimates

Different poverty lines obviously generate different poverty estimates. How sensitive are poverty estimates to alternative poverty measures? The consumption expenditures of a population are distributed around the mean, with the degree of skewness providing a first indication of a country's inequality. Obviously, the higher (lower) the poverty line—the location of the cut-off marker in the distribution of consumption expenditures—the higher (lower) will be the head count poverty estimates. In fact, since the consumption of most Indonesians (and the citizens of most countries) is clustered close to the national mean (and median), even relatively small variations in the poverty line can generate quite large differences in head count poverty.

The data in Table 1 illustrate these differences. For example, in 2017, the head count poverty estimates ranged from 5.7% according to the $1.9 poverty line to 10.1% for the national line, and 27.3% for the $3.2 line. Which number is the correct one? The answer of course is that it depends on what one is trying to measure, and what the community regards as an acceptable minimum standard of living. A first assumption would be that the national (BPS) line reflects such preferences. However, for intercountry comparisons, the international benchmarks are the relevant yardsticks. These numbers are also highly sensitive to the distribution of consumption, such that the relativities and rankings change over time. In 1996, for example, the revised national poverty estimate was lower than both international poverty lines.

The sensitivity of poverty estimates to alternative poverty definitions is clearly illustrated by examining more closely the distribution of consumption expenditures. Figure 1 shows the percentile expenditure distribution according to Susenas for 6 years over the period 1980–2018. Two poverty thresholds are

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[13]See, for example, Dartanto and Nurkholis (2013); Dartanto, Moeis, and Otsubo (2020); De Silva and Sumarto (2014); and World Bank (2018a).

Figure 1. **The Distribution of Consumption Expenditure by Percentile**
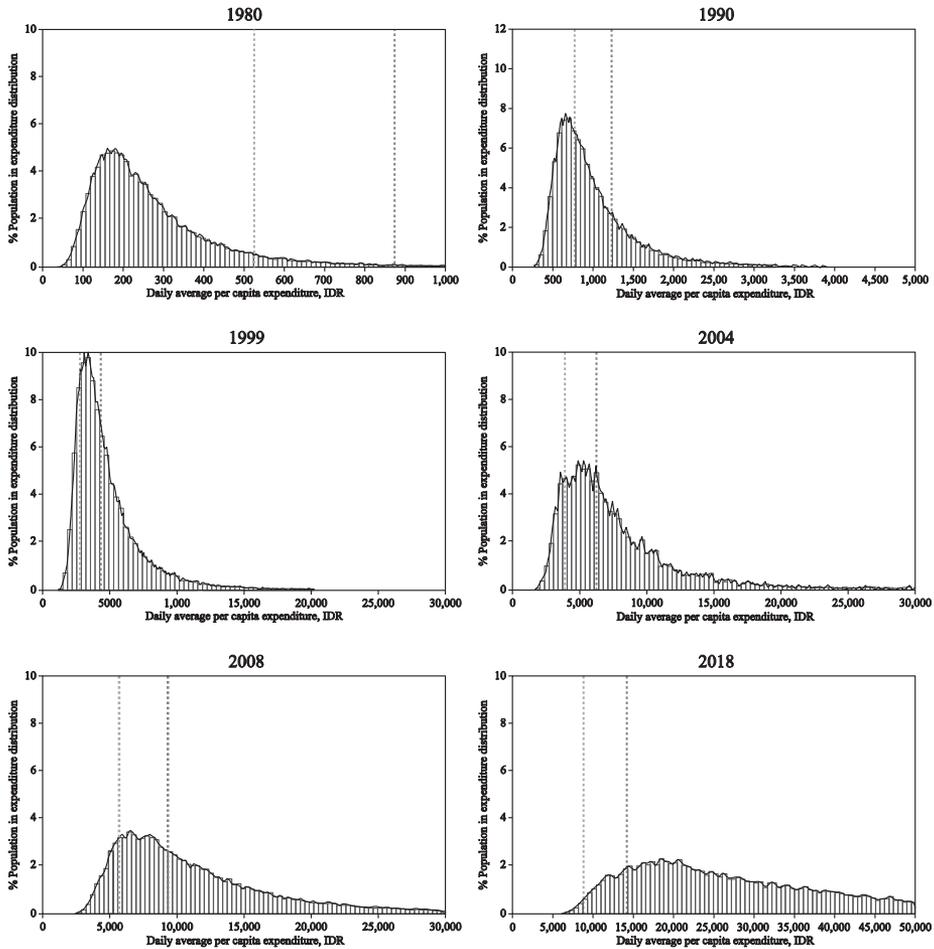
IDR = Indonesian rupiah.
Note: The left dashed line refers to the $1.9 poverty line (PPP at 2011 prices), while the right dashed line is 1.5 times this measure.
Source: Author's calculations based on Badan Pusat Statistik. Survei Sosio-Ekonomi Nasional, 1980–2018.

superimposed on this distribution: the $1.9 line (PPP at 2011 prices) and a line that is 1.5 times this measure. The latter is introduced to indicate the effects on measured head count poverty of a relatively small change in the poverty threshold. There are three key points to observe. The first is that the distribution is a skewed one. The majority of people are below the mean, which is pulled up by a small number of rich consumers. The second is the shift to the right in the distributions over time, as ever more Indonesians crossed the poverty threshold. Third, most people are clustered close to the mean (and median); that is, they are poor or near poor. (I will

show below that there is also considerable mobility between these two groups.) To emphasize, this clustering in turn explains why relatively small adjustments to the poverty line can result in large changes in recorded poverty incidence.

C.   How Responsive is Poverty to Economic Growth?

As noted, changes in poverty are determined by the aggregate rate of economic growth and the responsiveness of poverty to that growth. The latter, the growth elasticity of poverty (GEP), is defined as the ratio of the proportionate change in the poverty measure to the rate of growth in the mean over the same period. I focus here on the relationship between the change in the head count poverty percentage and the rate of growth in GDP per capita. (Alternative poverty measures could also be selected.) Therefore, the GEP incorporates the effects of the distribution of income (and wealth) on poverty reduction. The more egalitarian this distribution, the larger the impact on poverty of a given rate of economic growth. Since, as shown above, the majority of households' expenditures are clustered close to the mean, the results can be highly sensitive to even small changes in the expenditure of these households. Therefore, an aggregate inequality measure such as the Gini ratio may not necessarily detect these changes. For example, poverty incidence is highly sensitive to a change in the price of food staples, even though the impact of the latter on the Gini may be relatively small.

The GEP is derived from the following identity: $\Delta P = \Delta Y (\Delta P / \Delta Y)$, where P is head count poverty and Y is per capita GDP. I estimate it on an annual basis for the period 1970–2018. Theory provides little a priori guidance on its likely trend. It might be conjectured that poverty would be less responsive to growth during the authoritarian, centralized Soeharto regime compared to the democratic regime after 1999, which also saw the introduction of modest social welfare transfers. Yet, summarizing this literature, I have argued elsewhere that many of the Soeharto era policies were actually pro-poor (Hill 2000, 2018). Moreover, political theory informs us that there is no guarantee under democracy that the voting preferences of the majority would necessarily attach a high weight to the welfare of the bottom 10%–20% of the population in terms of income distribution. Agricultural and labor market policies also have a major impact on the GEP, as will be discussed further below, and there are regional and gender poverty traps that are not necessarily responsive to growth. More broadly, it may be the case that in the early stages of economic development, growth is an effective if blunt instrument for poverty alleviation, but focused, fine-tuned measures are required to address the special needs of the residual, hard-core population.

With these caveats in mind, I now examine the data in Table 2, which presents the GEP estimates.[14] The table assembles the BPS head count poverty estimate and

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[14]See Pritchett (2011) for a discussion of some of these issues in the Indonesian context.

Table 2. **Growth–Poverty Elasticities, 1970–2018**

Year	Head Count Poverty Rate (%)	Change in Head Count Poverty Rate (%)	GDP per Capita (LCY, constant price 2010)	GDP per Capita (1976 = 100)	Change in GDP per Capita (%)	Implied Growth Elasticity
1970	60		7,016,451	78.0		
1976	40.1	−33.2	8,992,523	100.0	28.2	−1.18
1978	33.3	−17.0	9,948,191	110.6	10.6	−1.60
1980	28.6	−14.1	11,188,870	124.4	12.5	−1.13
1981	26.9	−5.9	11,796,809	131.2	5.4	−1.09
1984	21.6	−19.7	12,564,051	139.7	6.5	−3.03
1987	17.4	−19.4	13,453,897	149.6	7.1	−2.75
1990	15.1	−13.2	15,522,805	172.6	15.4	−0.86
1993	13.7	−9.3	17,891,101	199.0	15.3	−0.61
1996	11.3	−17.5	21,434,872	238.4	19.8	−0.88
Average						−1.46
Median						−1.13
End-to-end, 1996–1976		−71.8			138.4	−0.52

Year	Head Count Poverty Rate (%)	Change in Head Count Poverty Rate (%)	GDP per Capita (LCY, constant price 2010)	GDP per Capita (2000 = 100)	Change in GDP per Capita (%)	Implied Growth Elasticity
1996	17.47		21,434,872	110.0		
1998	24.2	38.5	18,946,595	97.2	−11.6	−3.32
1999	23.43	−3.2	18,831,293	96.6	−0.6	5.23
2000	19.14	−18.3	19,484,343	100.0	3.5	−5.28
2001	18.41	−3.8	19,915,014	102.2	2.2	−1.73
2002	18.2	−1.1	20,523,897	105.3	3.1	−0.37
2003	17.42	−4.3	21,208,867	108.9	3.3	−1.28
2004	16.66	−4.4	21,970,090	112.8	3.6	−1.22
2005	15.97	−4.1	22,903,436	117.5	4.2	−0.97
2006	17.75	11.1	23,834,756	122.3	4.1	2.74
2007	16.58	−6.6	25,004,283	128.3	4.9	−1.34
2008	15.42	−7.0	26,152,132	134.2	4.6	−1.52
2009	14.15	−8.2	26,998,988	138.6	3.2	−2.54
2010	13.33	−5.8	28,302,888	145.3	4.8	−1.20
2011	12.49	−6.3	29,659,799	152.2	4.8	−1.31
2012	11.96	−4.2	31,047,023	159.3	4.7	−0.91
2013	11.37	−4.9	32,362,911	166.1	4.2	−1.16
2014	11.25	−1.1	33,570,451	172.3	3.7	−0.28
2015	11.22	−0.3	34,794,095	178.6	3.6	−0.07
2016	10.86	−3.2	36,132,033	185.4	3.8	−0.83
2017	10.64	−2.0	37,549,519	192.7	3.9	−0.52
2018	9.82	−7.7				
Average						−0.90
Median						−1.18
End-to-end, 2017–2008		−36.3			43.6	−0.83
End-to-end, 2008–1998		−36.3			38.0	−0.95
End-to-end, 2017–1998		−56.0			98.2	−0.57

GDP = gross domestic product, LCY = local currency.
Source: Badan Pusat Statistik national accounts data (Unpublished).

its percentage change for that year (columns 2 and 3) and real GDP per capita and its percentage change (columns 4–6). The implied growth elasticity is calculated in column 7. The series are presented for all years for which there are Susenas data, with a break in 1996 to incorporate the revised BPS poverty definition. The estimates through 1996 generally span more than 1 year since the Susenas was not conducted annually for most of this period. Summary period averages (mean and median) are also presented.

Several findings emerge. First, the elasticity has the expected negative sign for every year. That is, poverty declines with economic growth, and the converse holds for the aberrant 1997/98 Asian financial crisis period and also for 2006, the year of rising petroleum and rice prices. Second, on average, poverty was more responsive to growth over the period 1976–1996 than it was for the period 1996–2018. (This refers to my preferred measure, the mean; the median figures are quite similar.) Third, not surprisingly, there are considerable year-to-year variations to the extent that one hesitates to draw major conclusions. But at least some general inferences may be drawn. One is that the transition to democracy has not had any appreciable impact in either direction. Another is that the commodity boom years of the 1970s and approximately 2005–2012 do not stand out as periods of highly responsive poverty declines. Furthermore, poverty responsiveness in the last 5 years of the review period appears to be low, with all but one observation being below unity. In fact, the one period when poverty appeared to be the most growth responsive was the 1980s, coinciding with the very strong growth in rice production and labor-intensive manufactured exports. However, these are at best tentative inferences since many factors influence these outcomes.

The combined effects of growth and inequality may also be examined by estimating growth incidence curves (GICs), which show the annualized growth rate in per capita consumption or income for each group (e.g., percentile and decile) between two points in time.[15] The results are presented in Figure 2 for the period 1980–2017, both for the entire period and for key subperiods: 1980–1990, 1990–1996, 1996–2000, and 2000–2017. As noted, these coincide with fairly distinct episodes, which include, respectively, policy reform in the wake of the commodity boom, high growth prior to the 1997/98 Asian financial crisis, the 1997/98 Asian financial crisis and recovery, and slower growth during the democratic era. The spatial plus temporal series is used, and the data are derived directly from the unadjusted Susenas data. Owing to the undercoverage of Susenas, the average consumption growth rates are lower than those reported in the national accounts. Therefore, my focus is on the relativities rather than the absolute changes.

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[15]See Ravallion (2016, 264–66) for a concise explanation of the two concepts and the link between them. I am very grateful to Vivi Alatas and Imam Setiawan at the World Bank Jakarta office for kindly providing these data. However, all interpretations are mine alone.

Figure 2. **Growth Incidence Curves for Indonesia (Spatial Plus Temporal), 1980–2017**
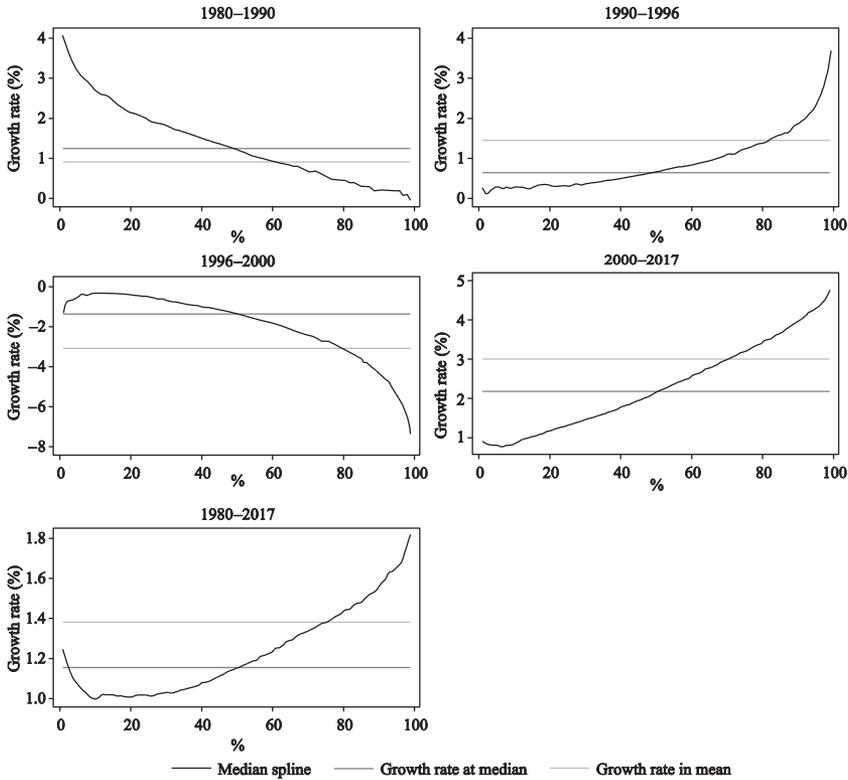
Source: Author's calculations based on World Bank Jakarta data (Unpublished).

Several observations are relevant. First, apart from the special case of the 1997/98 Asian financial crisis, the growth of consumption for practically all households is positive, confirming the generalized decline in poverty incidence. Second, for the period as a whole, the curve takes a reverse J shape (i.e., upward sloping from about the third decile). This implies rising inequality since higher-income groups are benefiting at a faster rate. The expenditure of the bottom 5% is above average, whereas the next 30 or so percentiles are below average. Looking at the subperiods, the clearest example of egalitarian growth occurred in the 1980s. As noted, this was the decade of strong agricultural growth and major trade and investment liberalization that spurred on labor-intensive manufactured exports. The necessary fiscal adjustments in the wake of declining oil prices were also handled in a distributionally sensitive manner, as demonstrated by Thorbecke (1991). This pattern was exactly reversed in the period 1990–1996, as the GIC rose with higher consumption groups, with a particularly pronounced increase for the top decile. This was the period of financial liberalization and egregious Soeharto

family corruption, factors which may serve as hypothesized explanations for the trend. The bottom four deciles are recorded as having slightly negative consumption growth; although in practice, after allowing for the Susenas understatement, the actual growth was probably positive.

The GIC for the crisis period 1996–2000 represented a return to declining inequality, albeit with most groups also experiencing declining consumption. The three lowest decile groups were the least adversely affected, reflecting agricultural buoyancy and the resilience of the informal sector, while the top consumption groups, connected to the imploding modern finance and service economy, were the most affected. The democratic era of 2000–2017 shows a return to inequality; that is, the higher the consumption group, the faster the increase in consumption. At least in this era, the consumption of all groups was rising. Suryahadi and Al Izzati (2019) have decomposed the GICs over this period into presidential terms (see also De Silva and Sumarto 2014). They find that the GICs are positively sloped during the two Yudhoyono presidencies, meaning the higher consumption groups benefited the most, whereas during the Jokowi presidency (at least its first 3 years), the GIC was an inverted U, indicating that the middle class were the primary beneficiaries.

D.   Moving In and Out of Poverty

The discussion thus far has been premised on the assumption that people are either poor or nonpoor. But the reality is infinitely more complex principally because, as noted, the expenditure of the majority of the population is clustered close to one or more of the poverty lines. Thus, even minor shocks, positive or negative, can easily push people above or below the poverty line. The question then is: how much mobility (or churning) is there across the poverty line? The answer is: a significant amount.

There are various one-off mobility estimates from Susenas, but this data series is generally not constructed in a manner that enables panel data analysis to be undertaken (a significant shortcoming of an otherwise high-class dataset). Fortunately, the Indonesian Family Life Survey (IFLS) data enable longer-term mobility estimates to be made.[16] The IFLS, a socioeconomic and health survey, is one of the most comprehensive longitudinal datasets of its type in the developing world. It commenced in 1993 with a survey of 22,000 individuals living in 7,224 households drawn from 13 of the country's then 26 provinces, covering 83% of the national population. This was followed by IFLS II in 1997 with a (remarkable) 94.4% recontact rate. Subsequent rounds were conducted in 2000 (95.3% recontact rate), 2007 (93.6%), and 2014 (90.5%). The IFLS is not a specialized poverty

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[16]See Firman (2018) for a detailed description of the IFLS. The IFLS has become an invaluable public good as the most widely used nongovernment statistical resource in Indonesia (and probably Southeast Asia). It is not a specialist poverty data collection exercise, and it does not adjust for regional price differences. For more details, see https://www.rand.org/well-being/social-and-behavioral-policy/data/FLS/IFLS.html.

database. But it is the best data source of its type available, it is conducted rigorously by specialists in the field, its recontact rates are high by international standards, and its results have been intensively used and scrutinized by thousands of researchers.

The following analysis presents and discusses the results of a pioneering World Bank (2018a) research report.[17] The researchers developed "synthetic" province-specific poverty lines drawing on the IFLS data that are consistent with Susenas. The data were calculated for each contiguous set of IFLS surveys (i.e., IFLS I to IFLS II, and so on), as well as for the entire 21-year period (IFLS I to IFLS V). The authors caution that the latter estimates, while analytically the most interesting, owing to the longer time period, may be subject to sample bias, due to the higher attrition rate.[18] Moreover, the subperiod analysis is interesting as it facilitates an examination of the impacts of period-specific events, such as the 1997/98 Asian financial crisis, which would be obscured in the longer-period analysis.

To examine mobility, the authors classify households into four groups: (i) poor, (ii) vulnerable, (iii) aspiring middle class, and (iv) middle class. The classifications are defined with reference to the revised official BPS line. The poor have a consumption level that falls below that line, while the dividing lines for the vulnerable and aspiring middle class are consumption levels that are approximately 1.5 times and 3.5 times the poverty line, respectively. That is, the consumption of the vulnerable falls between 1 and 1.5 times the poverty line, and so on.

The results are presented in Table 3. Five comparative sets are provided. They enable conclusions to be drawn about the extent of upward and downward mobility over time. For example, from the fifth set (1993–2014), it can be seen that 24% of the individuals who were poor in 1993 remained so in 2014, while the remaining 76% had moved into one of the three better-off groups.

The major conclusion is a positive one of upward economic mobility and relatively rare cases of significant downward mobility. For the period as a whole, more than half the individuals who were poor at the beginning of the period had moved into either the aspiring or actual middle-class groups. The vulnerable in 1993 registered similar upward mobility. On the other hand, the great majority (87%) who were middle class at the beginning of the period either remained in the middle class or the aspiring group.

Broadly similar patterns are evident for each of the subperiods, except for that straddling the 1997/98 Asian financial crisis, although the mobility is obviously less pronounced for shorter time periods. In each subperiod, even (surprisingly)

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[17]I thank the pioneering research team and particularly its principal author, Matthew Wai-Poi, for kindly making these research results available and for many helpful discussions. To the best of my knowledge, there has only been one other detailed examination of Indonesian poverty mobility using the IFLS data, that by Dartanto, Moeis, and Otsubo (2020). Although they employ different poverty thresholds and methodologies, their principal conclusions are similar to ours.

[18]Examples include households splitting into new households, households moving into non-IFLS regions, refusals to participate, and mortality.

Table 3. **Moving In and Out of Poverty**

IFLS Transition Matrices

Group	Poor	Vulnerable	Aspiring Middle Class	Middle Class
1. IFLS I–II, 1993–1997				
Poor	39.9	30.3	25.7	4.2
Vulnerable	18	29	44	9
Aspiring middle class	8.6	17.4	53.5	20.5
Middle class	2	8.4	41.8	47.9
2. IFLS II–III, 1997–2000				
Poor	44.8	29.4	23.3	2.5
Vulnerable	25.2	30.3	39.8	4.7
Aspiring middle class	10.8	19.9	54.3	15
Middle class	4.2	7.4	44	44.4
3. IFLS III–IV, 2000–2007				
Poor	34.8	31.1	29.6	4.5
Vulnerable	19.7	28.5	45.6	6.2
Aspiring middle class	8	20.4	53.8	17.8
Middle class	2.6	7.6	47.1	42.6
4. IFLS IV–V, 2007–2014				
Poor	30.4	28.1	36	5.5
Vulnerable	16.7	20	46.1	10.2
Aspiring middle class	6.6	15.4	54.9	23.2
Middle class	2.5	7.7	37.9	51.9
5. IFLS I–V, 1993–2014				
Poor	23.7	23.9	42.1	10.4
Vulnerable	15.1	21.8	47.2	15.8
Aspiring middle class	7.7	17.7	51	23.6
Middle class	3.8	9.3	43.2	43.7

IFLS = Indonesian Family Life Survey.
Source: World Bank. 2018b. *Revisiting the Distributional Impact of Fiscal Policy in Indonesia—Who Benefits, Who Pays?* Unpublished paper.

1997–2000, more than half of the poor moved upward. Such a pattern is also evident for the vulnerable, with more than half moving upward except during the 1997/98 Asian financial crisis. At the other end of the spectrum, it is very uncommon for the middle class to slip backward: less than 5% fall into poverty in any of the periods, while only slightly higher numbers fall into the vulnerable group. However, entering the middle class is still relatively uncommon for the poor and, to a lesser extent, the vulnerable. It might be hypothesized that the rate of upward mobility has been declining in the face of rising inequality, but the data do not facilitate detailed examination of this issue. Only the period 1997–2000 recorded declining inequality, but there were many other potentially causal factors also present at this time of crisis.

E.   Indonesia in Comparative Perspective

How does the Indonesian record look in comparative international perspective? There are no obvious country comparators in the sense of countries

Table 4. **Poverty, Comparative Dimensions**

Comparative Poverty Estimates, 1981–2015

Country	Initial Poverty (%)	Final Poverty (%)	Difference	Difference per Year	IGPE
1. Povcal $1.9					
PRC	88.1	0.7	87.4	2.6	−1.8
India	57.4	13.4	44	1.3	−0.9
Indonesia	76.4	7.2	69.2	2	−1.3
Philippines	24.2	7.8	16.4	0.5	−1.2
Thailand	19.6	Negligible	19.6	0.6	−4.6
2. Povcal $3.2					
PRC	99.3	7	92.3	2.7	−1.2
India	86.5	50.4	36.1	1.1	−0.4
Indonesia	93.5	33.2	60.3	1.8	−0.7
Philippines	53.1	32.7	20.4	0.6	−0.5
Thailand	43.1	0.5	42.6	1.3	−4.4

IGPE = implicit growth–poverty elasticity, PRC = People's Republic of China.
Source: World Bank. PovcalNet. iresearch.worldbank.org/PovcalNet (accessed May 15, 2019).

with very similar characteristics. I therefore chose four middle-income Asian economies: the two developing giants, the People's Republic of China (PRC) and India; and two neighboring middle-income ASEAN states, the Philippines and Thailand. These data are based on the World Bank's PovcalNet dataset for the longest time period available, 1981–2015. These data draw on the country statistics and then estimate head count poverty according to the $1.9 and $3.2 (PPP at 2011 prices) poverty lines. The results are presented in Table 4 in the form of point-to-point estimates between the initial and final years.

The results are largely driven by these countries' per capita incomes and rates of economic growth. Indonesia adopts an intermediate position in both respects, and so too do its poverty numbers. In 1981, its head count poverty was the second-highest, behind only the PRC (and, surprisingly, higher than India according to these estimates). Over this 34-year period, poverty fell in all five countries according to both measures. As would be expected, the decline was the fastest in the high-growth PRC, such that it was transformed from the highest-poverty country to a level similar to that of Thailand. But Indonesia's record was also impressive, achieving the second-fastest rate of decline and an implicit growth–poverty elasticity (IGPE, final column) that was second only to that of the PRC.[19] This is a key finding and a reminder that, for all the challenges, Indonesia's poverty alleviation record is an impressive one by international yardsticks.

Several studies have examined various aspects of these international comparisons.[20] A frequent comparator for Indonesia is the Philippines given the two countries' proximity, archipelagic geography, and similar experiences of deep economic crises triggering a transition from authoritarian to democratic rule (albeit

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[19]The Thai IGPE may be discounted as its poverty estimates for the final year had fallen to virtually zero.
[20]Recent examples include Sumner and Edward (2014), Warr (2015), and World Bank (2017).

12 years apart). As Table 4 shows, Indonesia has achieved much faster poverty reduction over this period. The IGPE's are quite similar, indicating that it is Indonesia's faster growth rate that has made the difference. In the current decade, however, the Philippines has grown slightly faster, suggesting that these poverty differences are likely to narrow.[21]

F.   Measurement and Data Issues

The accuracy of the Indonesian poverty estimates depends crucially on the one major household survey, Susenas. The difficulty of obtaining reliable consumption and income estimates should not be underestimated. For one thing, the estimated average consumption derived from Susenas has been falling relative to the consumption estimate in the national accounts, implying that BPS is aware of rising undercounting (Booth 2019). Moreover, it is difficult to obtain data on individuals living on the margins of society (e.g., the homeless). The incomes of poor households are typically highly variable, especially if derived mainly from agriculture or petty trade. In addition, estimating expenditure in the presence of extensive home consumption remains problematic. The extremes of the distribution therefore tend to be underestimated and hence probably understate poverty incidence (and also inequality).

The choice of price deflators is a crucial issue and one that may affect the poverty estimates, particularly in periods of high inflation. First, is the consumer price index (CPI) an accurate indicator of changes in the cost of living? Olivia and Gibson (2013, 99) examined this issue carefully with reference to Indonesia. Adopting a framework that makes allowances for substitution bias, quality-change bias, outlet-substitution bias, and new-goods bias, they concluded that the official CPI "greatly understated the increase in the cost of living prior to the year 2000, and most especially between 1993 and 1997." From 2000 to 2008, however, the opposite was the case: "CPI appears to exaggerate recent increases in the cost of living." Moreover, they argue that "over the entire period … (1993–2008), CPI bias averaged four percentage points annually, equivalent to almost one-third of the annual average rate of measured inflation over the same period." In other words, the trend rate of improvement in living standards over this period has been higher than that suggested by the data based on the official CPI adjustment.

Second, should specific deflators be used for different income classes and regions? In the presence of large differences, the answer is yes. Suryahadi and Sumarto (2010) show that it matters during periods of high inflation, such as experienced in 1998. They employ five deflators and show that the results differ significantly. A further qualification is the assumption that all members of the

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[21]There is an extensive literature on the relatively slow pace of poverty reduction in the Philippines and its determinants. See, for example, Clarete (2018).

population have the same consumption basket. This is obviously incorrect; the basket of the rich and the poor are very different, children generally eat less than active adults, the sick have special needs, and so on. Priebe (2016) addressed this issue, using the 2013 Susenas and the 2007/08 IFLS, to explore the sensitivity of the poverty results to assumptions about the personal characteristics of individuals, including their age, gender, body weight, and physical activity. The methodology employed was to convert everybody to adult-equivalent scales. He concluded that the Indonesian poverty profile is robust, although effective poverty incidence may be lower among children and higher for prime-age males in agriculture.

In addition, there are the usual challenges of conducting household surveys, particularly in developing countries. In Indonesia, some of the eastern regions are very difficult for enumerators to access, as are conflict-prone regions. In some years, the Muslim fasting month falls during the enumeration period. Account also needs to be taken of the purchase of lumpy consumer durable items, home consumption, imputed rental income, and unpaid labor.

III. Inequality

I have already alluded to the importance of inequality as a determinant of poverty outcomes. I now examine inequality trends in more detail. The first systematic attempts to measure Indonesian inequality through the Susenas household surveys were in the mid-1960s. During the 1970s, the estimates became more reliable.[22] I focus here on inequality since the early 1980s, by which time the comparative PovcalNet data became available.

Figure 3 presents the Gini index for Indonesia and the same four comparator countries for the period 1981–2017 or the earliest year available. In years where data are not available (mostly in the last century), the missing years are estimated by linear interpolation. According to these estimates, Indonesia was a relatively low-inequality country in the early 1980s, with a Gini index between 30% and 35%, similar to that of India. It therefore differed significantly from the Philippines (and Malaysia), which had inherited very high levels of inequality from the colonial era and which had not attempted any significant redistributive measures. It also differed from Thailand, which had historically low inequality that had been rising sharply since the 1960s (much of it spatial in nature), and the PRC, where inequality was rising rapidly after the 1978 liberalization.

Indonesia's inequality then began rising around 1990, a trend that continued until the 1997/98 Asian financial crisis, when the Gini index fell sharply to briefly below 30% (in the Povcal estimates), reflecting the fact that individuals connected to the higher-income, modern industrial service economies were the most adversely

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[22]See Booth (1992, 2016) and references cited therein.

Figure 3.   **Comparative Gini Indexes of Select Countries**
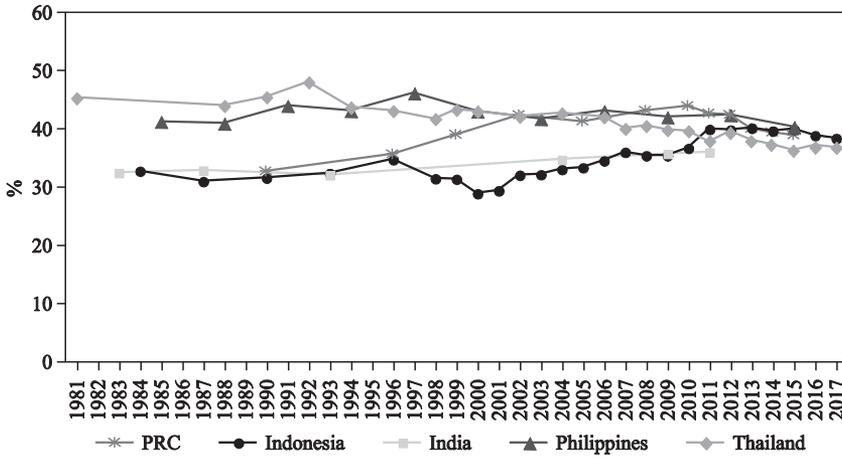
PRC = People's Republic of China.
Source: World Bank. PovcalNet. iresearch.worldbank.org/PovcalNet (accessed May 15, 2019).

affected, as compared to those earning their livelihood in agriculture, especially off-Java. As the economy recovered, coinciding also with the beginning of the democratic era, inequality began to rise again. It continued to rise sharply for the next decade, by about 10 percentage points, one of the largest increases in inequality in the Asia and Pacific region (Kanbur, Rhee, and Zhuang 2014). In recent years, Indonesia's Gini index first stabilized and then declined slightly, which in turn explains the diverging GIC trends by subperiods referred to above. As Figure 3 illustrates, the Indonesian pattern has therefore differed from its comparators in the sense that, with the partial exception of India, its rising inequality is of recent origin. But it can now be regarded as a moderately high-inequality country.

There are no reliable cross-checking data on Indonesian inequality. But several authors have queried the results, suggesting both underestimates and overestimates in the data.[23] Most researchers believe that the estimates for high-income individuals are underreported, either deliberately or through survey access difficulties (e.g., gated communities). Taxation data are unlikely to shed much light on the underreporting since Indonesia's weak tax effort (about 11% of GDP) suggests widespread evasion among the wealthy.[24] Similarly, the various "top income" projects are unlikely to come up with the answers if they too draw

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[23]See, for example, Booth (2016); De Silva and Sumarto (2014); World Bank (2016, 2017); and Yusuf, Sumner, Rum (2014).

[24]Nevertheless, some unpublished attempts to marry the tax data of high-income earners for 2013 with the Susenas data of the same year do tentatively indicate that the underreporting may raise the Gini index by 3–5 percentage points.

on a data source that underreports top incomes.[25] Some rudimentary cross-checks, such as sales of expensive apartments and luxury vehicles, are at least suggestive. Another concern raised by researchers concerns the treatment of income in kind and consumption of own production, which are typically underreported and thought to be especially relevant for top and bottom income groups. For example, Nugraha and Lewis (2013) generate alternative estimates of inequality from Susenas, based on estimates of market and nonmarket income. Using 2008 data, they find that the estimated Gini coefficient falls from 0.41 to 0.21 if the latter is properly accounted for, and the income share of the bottom deciles rises more than fivefold.

There is no unified set of statistical decompositions or all-embracing explanations for these inequality trends. The Indonesian literature has therefore relied on a combination of partial statistics, inferential narratives, and international evidence. Theil decomposition analysis can shed light on some of the dimensions. For example, the World Bank (2017, 32) highlights the persistent disparities in access to education and other services, asserting that for Indonesia "more than one-quarter of inequality can be explained by differences in educational attainment across groups." The ADB's *Asian Development Outlook 2012* examined the contribution of spatial inequality (urban–rural and interprovincial) for the period 2007–2009 for selected Asian economies (ADB 2012). Indonesia adopted an intermediate position within the sample at 26%, which was well behind the PRC (54%) and broadly similar to India (32%) and the Philippines (21%).[26]

In several respects, the Indonesian policy regime has contributed to rising inequality, if not directly then at least indirectly by adopting a largely reactive approach to the problem. There are six broad areas where policy has impacted inequality and, by extension, the rate of poverty reduction. Most of these impacts are not amenable to precise quantification.

Labor market

The labor market is the crucial element connecting economic growth and rising living standards. Indonesia's labor market has always had pronounced dualistic characteristics; but these have been accentuated during the democratic era by increasingly populist and restrictive employment provisions, especially minimum wages and severance pay requirements. The result was anaemic formal sector employment, for at least the first decade of this century, and rising wage inequality between the small protected and regulated sector and the large

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[25]See the important top income study for Indonesia by Leigh and van der Eng (2009), which did indeed find a rising share accruing to the top 1% and 5% of income earners.

[26]These estimates are not strictly comparable across countries unless the number of subnational units is similar.

unregulated informal sector. Fewer Indonesians have therefore migrated out of poverty by securing jobs in the formal labor market.[27]

Education policy

The major conclusion from the large literature on Indonesian education is that the country has made impressive progress according to most quantitative indicators, but the evidence suggests that the education outcomes are not equalizing. That is, there are significant disparities across socioeconomic classes on school retention rates and examination performance.[28] These differences connect to the increasingly unequal labor market outcomes, which, as noted, result from the globalization of the labor market and its increasingly restrictive domestic regulations. Therefore, larger numbers of Indonesians are trapped in low-skill, poorly paid occupations.

Trade and commercial policy

Since the 1997/98 Asian financial crisis, there has been a pronounced slowdown in labor-intensive, export-oriented manufacturing. This sector had driven very rapid formal sector employment growth in the 1980s, combined also with the strong growth in the food crop sector. For most of the 21st century, Indonesia has been losing global market share in the major labor-intensive manufactures, electronics, garments, and footwear sectors. This is partly the result of intensified supply-side conditions. But only partly as Viet Nam's market shares have been growing rapidly, and even latecomers like Cambodia have performed strongly. Various aspects of Indonesia's trade and commercial policy regime have contributed to this indifferent performance (Hill and Pane 2018).

Until the early 1990s, Indonesia generally followed a labor-intensive, egalitarian growth path, akin to much of early-stage growth in other high-growth East Asian economies. As documented elsewhere, several factors were at play. Agriculture, especially rice production, grew strongly from the mid-1970s, as did the rural economy more generally. Both benefited from the effective recycling of the oil boom windfalls of the 1970s. From the early 1980s, policy liberalization triggered rapid export-oriented industrialization, mostly in labor-intensive sectors. There was a construction boom throughout this period, also mainly labor intensive in character. As documented in Figure 2 and Table 1, this resulted in the most rapid episode of poverty reduction in the country's recorded history.

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[27]See Ginting, Manning, and Taniguchi (2018); and Manning (2014). On the Soeharto era, see Manning (1998).

[28]See the analysis in several papers by Daniel Suryadarma and colleagues. See, for example, Kurniawati et al. (2019).

Explicit price and market interventions

As noted above and drawing on the work of Patunru (2019), highly restrictive rice import policies have resulted in domestic rice prices that are well above the international price to the detriment of the poor, the majority of whom are net rice consumers. Another major price intervention—petroleum and electricity subsidies—has disproportionately benefited the wealthy. Both these interventions have had adverse equity implications.

Major decentralization

In 2001, Indonesia implemented a "big bang" approach to decentralization, in which substantial financial and administrative resources were delegated to the second level of regional governments. Combined with a very large commodity boom approximately over the period 2005–2012 that was driven by coal, palm oil, and gas, there was concern that spatial inequalities would increase. Thus far, the evidence suggests that interregional disparities have not increased, at least at the provincial level (Hill and Vidyattama 2016).

The role of social policy, taxes, and transfers

Prior to the 1997/98 Asian financial crisis, Indonesia effectively had no social welfare programs, with the partial exception of the various INPRES (presidential instruction) grants. Various social transfer programs have been introduced over the past 2 decades. They are modest in scale and have achieved mixed targeting success, but at least they are the first steps toward the construction of a rudimentary welfare state. There are also the beginnings of basic health insurance for those—the great majority—outside the public and modern corporate sectors. These programs are being introduced at the same time that traditional extended family supports are weakening, owing to urbanization and smaller family sizes.

Currently the government operates four main social programs: (i) the Hopeful Families Program, or PKH, offering targeted conditional cash transfers; (ii) the Smart Indonesia Scholarship, or PIP, a transfer designed to keep children from poor families in school; (iii) Rastra/BPNT, offering subsidized rice (and now other foodstuffs) to poor families; and (iv) PBI-JKN, which pays the health insurance premiums of poor families.[29] Of these programs, the PKH is considered to be the most effective and best targeted, and it is therefore receiving funding priority.

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[29]See Nazara (2019) for a recent summary by a senior government official and Olken (2019) for a comprehensive review of the various programs' effectiveness on the basis of a decade of randomized controlled trial fieldwork. Note that the Indonesian acronyms for these programs have changed on several occasions in the last 2 decades.

Figure 4.   **Comparative Gini Ratios, Pretransfer and Posttransfers**
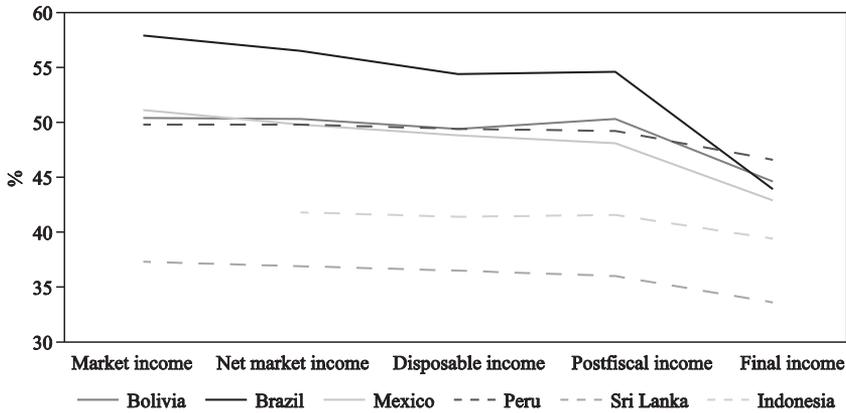
Source: World Bank. PovcalNet. iresearch.worldbank.org/PovcalNet (accessed May 15, 2019).

The programs are modest in scale, absorbing about 4% of total spending in the current budget, equivalent to about 0.6% of GDP. However, they are on an upward trend; over the past 6 years, their budgetary allocation share has almost doubled, while relative to GDP, they have risen about 50%. Their progress has been facilitated by the development of a unified national database (in progress), rapid advances in mobile and internet banking, and local-level democracy. There is now a large literature evaluating their design and impact, although precise estimates of the number of people lifted above the poverty line are not yet available.[30]

Reflecting their size and the complexities of targeting, the impact of these programs on aggregate inequality is mildly progressive but relatively small, at most about 2 percentage points of the Gini index. (Updated unpublished estimates report a similar conclusion.) As Figure 4 shows, programs in several Latin American countries have a far more significant impact. This is not surprising, as these programs are larger and have been in operation for longer. Moreover, pretransfer inequality was generally much higher in these Latin American countries, so the political urgency for such transfers was greater.

IV. Conclusion

My major finding is a reassuring, if unsurprising, one: living standards in Indonesia have risen more or less commensurately with economic growth. Although the majority of Indonesians are still poor or what may be termed "precariously

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[30]See, for example, Alatas et al. (2016); McCarthy and Sumarto (2019); Suryahadi and Al Izzati (2019); World Bank (2016, 2017, 2018); and the references cited therein. Progress in the first decade is comprehensively analyzed by the contributors in Manning and Sumarto (2011).

nonpoor," poverty incidence has fallen rapidly. It has generally fallen more quickly during periods of faster economic growth, with the converse also being true. Particular episodes of growth have had a pronounced impact on poverty eradication. Two periods stand out: (i) the accelerated promotion of the food crop sector (mainly rice) for about a decade from the mid-1970s, and (ii) the successful switch to labor-intensive, export-oriented industrialization for about a decade from the mid-1980s. Without necessarily drawing any causal inferences, outcomes have differed significantly across the two main political eras, 1966–1996 and post-1999. During the earlier period, economic growth and formal sector employment expansion were faster, while inequality was broadly stable, at least until the early 1990s. The result was a very rapid decline in poverty incidence. Since 1999—the democratic era—growth has been slower, inequality has risen, and the labor market has become more segmented, resulting in a continuing but slower poverty decline.

At a general level, these outcomes have been driven primarily by economic growth, which accelerated from the late 1960s. As noted in the introduction, this has been driven by the adoption of growth-promoting policies. As to specific policies, the evidence is more mixed. A labor-intensive growth path has been adopted for some periods. Particular price interventions have had variable, often negative, effects. Education facilities have spread rapidly but unevenly. Serious work has commenced in constructing the elements of a basic welfare state, although in aggregate the scale is still limited.

Owing to space constraints, this paper cannot claim to provide a comprehensive picture of Indonesian living standards. There are various alternative indicators of poverty, including the United Nations Development Programme's Multidimensional Poverty Index and several nonmonetary indicators (e.g., relating to education, health, gender relations, food supplies, and nutritional levels). Some of these are captured in an earlier United Nations Development Programme innovation, the Human Development Index. The labor market is an important dimension of living standards, including trends in overall participation rates and real wages. Moreover, as one of the world's most diverse economies, regional (subnational) inequality is an important dimension of Indonesian inequality.

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