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Asia's Third Giant: A Survey of the Indonesian Economy

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Abstract: This paper surveys the Indonesian economy and the drivers of socio-economic development over the past half-century. It highlights the country's rapid economic development in the face of unfavourable 'initial conditions'. We examine episodes in economic development, in particular comparing and contrasting the two main sub-periods, of high economic growth during the authoritarian Soeharto era, 1966-98, and moderate economic growth during the democratic era since 1999. The paper emphasizes the importance of sound macroeconomic management, economic openness, inclusive social progress and institutional development. For all the challenges that Indonesia faces, and its unfinished reform agenda, the major conclusion is one of development success, broadly defined.

Key words: Indonesia, economic development, Asian economies, policy reform

JEL codes: N15, O11, O53.

Asia's Third Giant: A Survey of the Indonesian Economy*

1. Introduction

Few countries have had such varied economic outcomes and policies as Indonesia. It has been variously described as a 'chronic economic dropout' (Higgins, 1968), a 'miracle' economy (World Bank, 1993), a 'showcase state' (Mortimer, 1973), and an 'improbable nation' (Pisani, 2014). Its economic history has been described as one of 'missed opportunities' (Booth, 1998). Its monetary policy history has featured both a major episode of hyperinflation (including the collapse of the central bank note-printing facility) and strict adherence to orthodox macroeconomic rules. Its political history has been equally mixed. It was once a member of the 'Peking-Pyongyang-Hanoi-Phnom Penh-Jakarta axis of newly emerging forces', as it withdrew from virtually all major international institutions. Then for a quarter of a century after 1966 it was a close ally of the United States during the Cold War era. Its foreign investment regimes have swung from the nationalization of all foreign property by the early 1960's to an open door posture a few years later (Lindblad, 2015).

Indonesia matters to its neighbourhood, including Australia, and increasingly to the world. It is the world's fourth most populous nation with about 265 million people. It has the largest number of adherents to Islam. It is the dominant albeit low-key power in the 630-million population of ASEAN, the Association of Southeast Asian Nations, the developing world's most successful and durable regional grouping. On some projections, by 2050 it may also be the world's fourth largest economy; currently it is the ninth largest (on a PPP basis). It has experienced one of the most severe economic crises in modern global history, with a growth collapse of some 20 percentage points in 1998. Yet out of this crisis came two positive surprises: a moderately rapid economic recovery and a sudden transition from one of the world's most durable authoritarian regimes (the 32-year Soeharto presidency) to a functioning and credible democracy, on most indicators the freest both in Southeast Asia and in the developing Moslem world.

Indonesia also features enormous sub-national diversity. It is the world's largest archipelagic state, with an estimated 17,000 islands and more than 300 ethnic groups and spoken languages. Within its borders, there is massive diversity on practically every socio-economic indicator. For example, the richest kabupaten

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(the districts to which central government finances and administrative authority have been devolved since 2001) has a per capita income about 50 times that of the poorest. Its flora and fauna comprise many unique tropical species.

The country's size is of such significance that it has on occasion had global environmental effects. It has the world's third most extensive tropical rainforests. When these forests are depleted more rapidly than usual, the country has been the fourth largest emitter of CO₂. The Krakatau and Tambora volcanic eruptions in 1883 and 1815 respectively significantly affected global climatic patterns, including several years without summer in Europe. Indonesia also straddles one of the world's most important 'choke points' for international commerce, the narrow Malacca Straits through which East Asia's shipping trade with Europe, the Middle East and Africa passes.

Against this backdrop, this paper surveys the Indonesian economy and the drivers of socio-economic development in the modern era. The major themes are development success but daunting policy challenges. Section 2 provides a scene-setting overview, along with some of the parameters and context within which to examine development outcomes and policy processes. The sections that follow investigate sectoral growth and structural change; investment and savings; international trade; macroeconomic management; sub-national development dynamics; poverty, inequality and living standards; environmental dimensions; and institutions and governance. Section 11 sums up. An extensive bibliography is also provided.

Several points need to be emphasized at the outset. Indonesia is a new nation. It didn't exist as a concept until the nationalist struggles of the early 20th century. It didn't exist as a formal nation state until 1945, and as a state that could be governed peacefully until 1949. Its international boundaries have changed three times since independence. The country's independent history typically divides into three eras, bookmarked by crisis years – 1945, 1965, 1998 – when the country's prospects were (wrongly) considered to be exceptionally gloomy. These periods correspond to the early independence era (1945-65), followed by rapid economic growth with authoritarian governance (1966-1998), and then moderate growth with democracy (1999 to present).

The first two turbulent decades of independence resulted in a sparse scholarly literature and the near-collapse of what was in any case a rudimentary statistical system. While emphasizing the importance of conditioning historical factors, this survey focuses mainly on the past half-century, the country's first era of sustained economic growth and rising living standards, punctuated by a deep economic and political crisis. This division also enables us to make some observations about economic outcomes and policy processes under two very different governance structures.¹

¹ A general note on sources is relevant at the outset. Wherever comparative statistics are presented, the source is the World Bank's World Development Indicators. Otherwise Indonesian statistics are used, sourced from Statistics Indonesia (Badan Pusat Statistik, www.bps.go.id).

2. Setting the Scene

The Context and Early History

History and geography have shaped Indonesian economic development. Almost 350 years of Dutch colonial rule, until well into the 20th century extractive and exploitative in nature, not only defined the country's geographical boundaries but also its dominant ideological currents.

Acemoglu and Robinson's (2012, p.250) observation, drawing on Reid (1993), is apposite:

'Dutch colonialism fundamentally changed [Indonesia's] economic and political development. The people ... stopped trading, turned inward. ... In the next two centuries, they would be in no position to take advantage of the innovations that would spring up in the industrial revolution.'

That is, the colony was increasingly integrated into the global economy, but as an appendage to the priorities and dictates of the imperial power, with very little commercial and political autonomy.

Although Indonesia declared independence in August 1945, as the occupying Japanese troops were withdrawing, the Dutch attempted to retake their colony and a bitter four-year war ensued. In Asia, Indonesia's decolonization struggle was second only to Vietnam's in its severity. At independence, Indonesia was a classic 'dual economy', with a small modern sector owned mainly by foreigners and the numerically small but relatively prosperous ethnic Chinese community, alongside the indigenous community engaged in agriculture, cottage industry and petty trade.²

These events and conditions were to shape the country's political destiny for many years. Sukarno, the country's founding president, espoused nationalism and socialism during his two-decade rule. Concerned mainly with nation building and preserving the country's territorial integrity, he had little interest in economics. As his government increasingly lost control of its budget, deficit financing led to escalating inflation. Black markets proliferated, particularly for foreign exchange. Directing his ire abroad, in 1964 Sukarno told western donors to 'go to hell with your aid' (Legge, 2003).

In 1965-66, Sukarno was deposed in controversial circumstances. A gruesome episode of killings followed, and a military-backed regime took control under President Soeharto. The following quotes by two of the most knowledgeable foreign economists at the time summarize economic conditions in the mid 1960's:

Benjamin Higgins (1968, p.678): 'Indonesia must surely be accounted the number one failure among the major underdeveloped economies ... a chronic economic dropout.'

² In fact, the international literature on dualism, originating from the work of the Dutch economist J.H. Boeke, was developed on the basis of theorizing from economic conditions and behaviour in colonial Indonesia (Szirmai, 2015).

Heinz Arndt (1984, p.29):

'A decade of ever-increasing economic mismanagement had brought a degree of economic breakdown with few parallels in modern history. The country was literally bankrupt, unable to meet payments due to foreign debt. ... Export earnings had fallen to a level where they were barely sufficient to finance half the country's minimum requirements, excluding debt service.'

Van der Eng (2002) was the first economist to carefully construct national accounts for the country during the 20th century. He concluded that per capita income in 1965 was lower than what it had been half a century earlier. Thus by the early 1960's Indonesia was one of the poorest countries in the world. Table 1 presents some socio-economic indicators around 1960 compared to its neighbours. The data reveal how far it lagged, especially on social indicators: average years of schooling for adults over the age of 25 was just 1.1, about half that of Malaysia and Thailand, and little more than one-third that of the Philippines. Its infant mortality rates were about double most of its neighbours and among the highest in the developing world.

Table 1: Comparative Socio-economic Conditions c1960

Geography has also been a crucial conditioning factor, in at least two respects. First, as a vast archipelagic state adjacent to the very open Singapore and Malaysian economies, Indonesia is by definition trade-oriented, but only if the policy environment is permissive. As a leading Indonesian economist put it, 'Indonesia was born a free trader yet is consistently reluctant to accept globalization.' (Basri, 2012, p. 46) Second, Indonesia is richly endowed with energy, minerals, maritime, forest and land resources. It therefore has to manage the inherent macroeconomic volatility and complex political economy associated with resource abundance, including the struggle to avoid the 'resource curse'.

These legacies continue to shape contemporary economic policy: inflation aversion (a response to the 1960's hyperinflation); ambivalence about markets and globalization; a philosophical attraction to egalitarianism; concern about inter-ethnic inequality; institutions still at an embryonic stage of evolution; and a strong commitment to the preservation of territorial integrity. We return to these issues throughout the paper.

An additional strand has been policy pragmatism, also shaped by the history of economic collapse and its political ramifications. Owing to the controversial beginnings of his presidency and his suppression of human rights, Soeharto's legitimacy depended on economic growth, and for that he turned to professional economists as technocratic ministers. The following quotations from two of the key policy actors are illustrative of their approach to policy:

'When we started out attracting foreign investment in 1967 everything and everybody was welcome. We did not dare to refuse; we did not even ask for bonafidity of credentials.' (Mohammed Sadli, quoted in Palmer (1978, p. 100))

'In 1954/55 [as finance minister], I was a strong protagonist of foreign exchange controls. ... Then I saw what happened under ... Sukarno. I know how easy it is to smuggle goods, and I know that those who are close to the sources of power will get their hands on the foreign exchange.' (Sumitro, 1984, p. 38)

The long-term growth record

In one of the most important turning points in Asian economic development, economic growth accelerated quickly under the Soeharto regime and it was sustained for almost all of the next three decades (Figure 1).³ If ever there were ever a country example to refute notions of 'path dependence', Indonesia would surely be it. The figure also identifies the country's major sub-periods: first, the latter years of slow growth in the period prior to 1966; second, the period of high growth 1966-96, averaging 7.3% per annum; third, the Asian financial crisis (hereafter AFC) 1996-99, when the economy contracted severely (including by 13.4% in 1998); and fourth, the return to growth in the democratic era beginning in 2000, when growth averaged 5.1%. Hence, without drawing any inferences, growth was about two percentage points faster in the authoritarian period as compared to the democratic era. There were also various episodes within these periods, especially 1966-96, which included the 1970's oil boom, and the reform and readjustment to the era of low energy prices beginning in the early 1980's. As a result of this growth, per capita GDP has also risen rapidly, as indicated on the right scale: over the period 1966-96 it increased almost four-fold, while for the period as a whole, including the AFC, it has increased more than six-fold.

Figure 1: Annual GDP Growth and GDP Per Capita, 1960-2016

There are two common criticisms of these growth numbers. First, they may be a 'myth' as Krugman (1994) and others have argued was the case for some Asian 'miracle' economies, in the sense that the GDP growth simply reflects rapid factor accumulation. This results in 'growth without productivity', which is therefore not sustainable. However, this has not been the case for Indonesia. Total factor productivity growth has been positive throughout the periods of rapid economic growth, typically in the range 2-4%, and exhibiting year-to-year fluctuations that mirror those of GDP quite closely.^{4 5}

³ The major growth accelerations in the other developing Asian giants, generally dated from 1978 for China (Naughton, 2006) and 1991 for India (Joshi, 2017), were also pronounced, but with the difference that these two economies were at least registering positive if slow growth prior to the reforms.

⁴ See for example the TFP estimates computed across countries and over time for major Asian economies by the Asian Productivity Organization, www.apo-tokyo.org

⁵ Another way of evaluating the economic performance is to compute Indonesian per capita income relative to the 'frontier', typically proxied by US per capita income. For the record, over the period 1965 to 2013, Indonesian

The second criticism is that growth has been purchased at the cost of running down the stock of natural capital, particularly non-renewable natural resources. As we will show below, environmental degradation has been a serious issue for Indonesia. Estimates of 'green growth' are very approximate and sensitive to the assumptions made. For what they are worth, as we show below, they suggest that this concept of growth has been perhaps one percentage point slower than GDP growth. Importantly, however, there is not a strong correlation between Indonesia's growth rates and its terms of trade. That is, the economy has grown quite quickly during periods of both high and low commodity prices. This is in part because administrations have tended to be more reform-oriented when 'forced' to by lower commodity prices. We return to this important political economy proposition below.

Two general observations on the growth record are pertinent. First, how does Indonesia's record compare internationally? And second, what do the occurrence of crisis episodes and the responses to them tell us about the quality of Indonesian economic management?

The comparative evidence is clear: although there is no obvious comparator for Indonesia,⁶ the country belongs to a very small group of mainly East Asian economies that have achieved exceptionally rapid growth for a sustained period. Two major World Bank studies (1993, 2008) illustrate this proposition. The Bank's 'miracle' study (1993) singled out seven East Asian economies, including Indonesia, for their very high growth. The Growth Commission (2008) report asked the question, which economies over the preceding century had grown exceptionally fast, defined as GDP growth averaging at least 7% for at least a decade. The authors concluded that there were just 13 economies among the 150 for which they could obtain reliable estimates. Indonesia was one of these 13, for the period 1966-96.

The country therefore belongs to a group of stellar economic performers. It may perhaps be churlish to attach a qualifier to this conclusion. It is that, among the East Asian stars, there is a divide between Northeast and Southeast Asia, placing Singapore analytically in the former group. The first group – China, and four NIE's (and earlier Japan) – achieved such rapid growth that per capita income since around 1960 has risen 12-16 fold, whereas the increase for Indonesia and other high-growth Southeast Asian economies has been a still very respectable 6-8 fold.⁷

per capita income (in PPP terms) approximately doubled relative to that of the US and it is now approaching 20% (Aswicahyono and Hill, 2016, pp. 106-7).

⁶ In the 1970's the usual comparator was Nigeria, given its size, tropical location and endowment of energy resources. Around 1970 Nigeria's per capita income and its human capital were somewhat higher than Indonesia's. However, the two countries parted company thereafter. By 1990, Indonesia's per capita income was three times that of Nigeria. See Bevan, Collier and Gunning (1999) for a detailed study of the two countries.

⁷ See Perkins (2013) who draws out this distinction.

Figure 2 traces the comparison among the three developing Asian giants. In the early 1960's, all were extremely poor. As the first to reform, Indonesia pulled away from the other two from the late 1960's. By 1990, its per capita income was still above China's, and well above India's. However, by this time China was growing even faster than Indonesia, while neither China nor India was affected by the AFC. Thus China overtook Indonesia around the mid 1990's, and the gap has widened as Indonesia returned to slower growth from 2000. India has narrowed the gap since the mid 1990's. The figure also includes the Philippines, a country that was well ahead of all the giants in the 1960's, and which shares some similarities with Indonesia.⁸ However, Indonesia overtook it in the early 1990's and, notwithstanding different experiences during the AFC, Indonesia remains ahead.

Figure 2: Per Capita Income, Indonesia and Comparators, 1960-2016.

Second, on the record of crisis management, since the early 1960's Indonesia has experienced four crisis or 'near-crisis' episodes. The record in all but one of the cases is a positive one, as Figure 1 illustrates. The early-mid 1960's episode was entirely home-grown in origins, and as noted the regime change led to rapid growth and crisis resolution, albeit at great human cost. The early-mid 1980's presaged a decade of debt and contraction for most developing country energy exporters, and at the beginning of the period Indonesia looked highly vulnerable owing to its heavy dependence on the energy sector for exports and government revenue. However, practically alone among these countries, it experienced only a mild and relatively brief slowdown in growth. At the margin, external financial support was helpful. But the main explanation was adroit anticipation and management of a looming crisis (Gelb and Associates, 1987; Hill, 2000). The government had invested the windfall gains from the oil boom quite effectively, in agriculture, infrastructure and education. Its debt levels were moderate owing to its self-imposed 'balanced budget' rule. As the terms of trade fell sharply, the authorities quickly depreciated the currency while maintaining prudent fiscal policy. The result was a very large and durable real exchange rate depreciation. Major microeconomic reforms were also introduced, freeing up the business environment and triggering a rapid supply-side response in manufactured exports.

Of the remaining two episodes, we examine the special case of the AFC in more detail below. This was the one major interruption to economic growth in the last half-century, but at least the economic recovery commenced quite quickly, albeit at a permanently slower growth rate. The fourth episode was largely a 'non-event', in the sense that during the global financial crisis (hereafter GFC) growth slipped by only 1.5 percentage points for the year as a whole. Thus with the exception of the AFC, Indonesia's record of crisis response and mitigation has been effective. This of course is a key reason for its overall good economic performance.

⁸ That is, location, archipelagic geography, and a deep economic crisis triggering a sudden transition to democracy.

3. The Sectors and Structural Change

The process of sectoral growth and structural change has been a largely conventional one, with a few significant exceptions. Before the onset of rapid economic growth, more than half of Indonesian GDP originated in the agriculture sector and about 70% of the workforce was employed in it. Yet malnutrition was widespread, affecting over half of the population. It was economic growth that both shifted workers out of agriculture and greatly improved nutritional intake. Figures 3 and 4 show this process of sectoral growth and structural change.

Figure 3: Growth of the Main Sectors, 1960-2016, A, M, S
 Figure 4: Structural Change, 1960-2016

While agriculture shrank from almost one-half to about one-tenth of the economy, it performed strongly for most of the period.⁹ Perhaps ironically for an authoritarian and centralized regime, the Soeharto presidency took agriculture seriously. Indonesia was a relatively late adopter of the green revolution, but it caught up quickly. The 1970's oil boom provided resources for investment in rural development. The country was transformed from being the world's largest rice importer, in some years importing one-third of the world's traded rice, to being largely self-sufficient by the mid 1980's. The tropical cash crop sector was also rehabilitated, and the country returned to being one of the world's leading producers of rubber, palm oil, and other crops (Barlow, 1997), facilitated by proximity to Malaysia, then the world leader in these crops.

Rapid economic growth also led to a major industrial transformation (Hill, 1997). Shut off from global markets, finance, technology and supply chains, Indonesia had a very small manufacturing sector in the mid 1960's. The opening of the economy led to double-digit manufacturing growth in almost every year from 1967 to 1996. This was initially a catch-up process, followed by import substitution behind trade barriers as industrial protection increased in the 1970's. The falling terms of trade in the 1980's led to a major outward reorientation in industrial policy, and for the first time Indonesia became a significant industrial exporter. The service sector also began to expand very quickly, with massive government investments in infrastructure and liberalization in the financial, transport and other sectors.

The two exceptions to this otherwise conventional story of structural change have been the mining sector and the accelerated growth of services after 2000. Mining sector growth has been shaped by trends in international commodity prices. In turn, when prices have been high it has had the familiar Dutch Disease consequences of squeezing profitability in the other tradable sectors, especially manufacturing since agriculture is only partly tradable. Since 2000, as Figures 3 and 4 show, apart from the commodity boom, services has emerged as the principal growth engine. Several factors explain this trend: a second commodity boom that resulted in an appreciation of the real exchange

⁹ Timmer (2015) and his earlier references cited in this paper are the key literature.

rate and thus rendered manufacturing less competitive (Garnaut, 2015, see also Figure 7 below); an agricultural policy that began to emphasize rents over productivity (Patunru and Rahardja, 2015); liberalization and technology change in key service sectors such as transport, telecommunications and business services; and the rise of China and its effect of lowering the global price of semi- and unskilled manufactures.

4. Investment and Savings

Rapid economic growth also created a virtuous circle of rising savings and investment that in turn sustained the growth. The anaemic growth prior to 1966 was both a cause and a consequence of low savings and investment. Higgins (1968) speculated that Indonesia may have been running down its capital stock for most of the period since the 1920's. By the late 1950's, capital inflows had dried up, as foreign property was nationalized and Indonesia shunned all but a small flow of aid from the Soviet bloc, most of dubious value. Government investment also collapsed.

The increase in both savings and investment was dramatic, rising from approximately 5-10% of GDP to over 20% in just a decade, and higher still subsequently (Figure 5). Indonesia joined the rest of East Asia as a high savings economy. Increased economic security and positive real interest rates provided households with an incentive to save. The government returned the budget to balance and then, as the 1970's oil boom took hold, it invested much of the windfall gains productively. Foreign aid and investment flowed in on a large scale. Reflecting the attractiveness of the country as an investment destination, Indonesia ran a persistent but moderate current account deficit for most of the Soeharto era.

Figure 5: Investment and Savings, 1960-2016 (I, S, I-S/GDP)

The AFC impacted significantly on these aggregates. Investment from all sources – corporate, government and foreign – fell sharply. Savings also fell as households dissaved as a consumption-smoothing strategy. The budget shifted from balance to a moderately large deficit (see below). Foreigners were no longer willing to lend to the country. As a result, the current account swung from deficit to surplus. The depth and severity of the crisis, and policy changes in its wake, are illustrated by the persistence of the current account surplus for over a decade after the AFC, and the fact that it took savings and investment levels almost a decade to return to those of the pre-crisis period.

5. International Trade

Commercial policy and international trade have been central to Indonesia's economic transformation. It has benefited from its international engagements

even while much influential opinion has been skeptical of the benefits of openness.¹⁰

Indonesia's increased economic openness, along with that of most of its neighbours, is revealed in its rising trade shares, that is, merchandise trade relative to GDP (Figure 6A). The increase is particularly evident from the late 1960's as commercial channels were re-opened and many formal trade barriers were abolished. It should be noted, however, that this measure of openness provides only a partial picture of Indonesian trade policy. First, the increase in the late 1960's was as much the result of the regularization of trade, as the incentives for extensive smuggling were abolished and the exchange rate was unified.¹¹ Second, Indonesian trade values are affected by international commodity prices: higher prices translate into higher trade values but they do not generally mean more open trade policy. In fact, it is often the reverse, in the sense that the forces of economic nationalism, and hence more restrictive trade policies, are in the ascendancy when the terms of trade are high. Third, the sharp increase in trade to GDP in the late 1990's reflects mainly the collapse of the denominator, that is GDP measured in US dollars. Along with the rising international trade, foreign direct investment (FDI) has also increased rapidly over this period, except during the AFC when many investors exited the country owing to political instability (Figure 6B).

Figure 6A: International Trade Shares, Indonesia and Comparators, 1960-2016
Figure 6b: FDI Shares, Indonesia and Comparators, 1960-2016

Trends in Indonesia's export composition reflect the interplay of changing comparative advantage, policy reform, and international commodity prices (Figures 6C and 7). Through to around 1970 the country's modest exports were mainly agricultural, with rubber the most important (Figure 6C). The 1970's oil boom saw a dramatic transformation in export patterns such that, by the end of the decade, Indonesia was in some respects a 'petroleum economy', with about three-quarters of its exports (and about two thirds of government revenue) originating from the energy sector. Manufactures were minuscule. The collapse in oil prices in the first half of the 1980's then resulted in a spectacular rise in manufactured exports, to the point where they became the country's major export group by the end of the decade. In effect, three channels were at work: first, statistically, the effect of lower oil prices on export values; second, the

¹⁰ The best recent examination of Indonesia's ambivalence towards globalization is Patunru et al (eds, 2018)

¹¹ Technical and physical smuggling of course persists, albeit on a smaller scale. A general rule of thumb is that when tariffs or their equivalent exceed about 25%, especially for high value-to-weight items, the smugglers are in business. Smuggling also increases in periods of political turbulence where there is a breakdown in central authority. For example, in the late 1990's several district governments along Sumatra's East Coast, which faces nearby Malaysia and Singapore, were known to be operating their own (illegal) import-export businesses. Owing to the sensitivities involved, Singapore, one of Indonesia's major trading partners and Southeast Asia's historic entrepot centre, still does not publish its trade statistics with Indonesia.

declining terms of trade had reverse Dutch Disease effects, mainly through the real exchange rate (Figure 7); and third, economic difficulties triggered sweeping commercial policy liberalization that particularly freed up the manufacturing sector. Since the AFC, the value of mineral and agricultural exports has fluctuated in line with international prices, while manufactured exports have lost their dynamism.¹²

Figure 6C: Indonesian Export Composition, 1970-2016

Figure 7: The Terms of Trade and the Real Exchange Rate

In the 21st century Indonesia missed an important commercial opportunity through the government's reluctance to adjust to the requirements of the most dynamic sector of East Asian trade and industrialization, the global production networks. This segment, which now accounts for over half of intra-East Asian and intra-ASEAN trade, requires very open trade and investment regimes and high quality logistics. Neighbouring countries, including latecomers such as Vietnam, have reformed more quickly in these areas (Athukorala, 2014; Soejachmoen, 2012).

Formal investigations of Indonesia's trade regime illustrate its general openness together with considerable inter-industry variations in industry assistance, and continuing resort to non-tariff barriers. During the Soeharto era, heavy industry, much of it state-owned, was the most highly protected. While remnants of this protection remain, some agricultural sectors now also receive high protection, including a ban on rice imports for extended periods.¹³

6. Macroeconomic Management and Economic Crises

Since the late 1960's, macroeconomic management has been an Indonesian success story, except for the special and short-lived case of the AFC. There has been a broad political consensus never to return to the 1960's episodes of hyperinflation and multiple exchange rates. Early in his presidency, the technocrats persuaded Soeharto to enact a 'balanced budget' rule, whereby the government only spent the resources it had available to it from domestic revenue and foreign aid.¹⁴ Bank Indonesia, the central bank, was subservient

¹² The second major commodity boom, running for about a decade from around 2004, differed from the first in several respects. The major export commodities during the latter period were coal and palm oil. Combined with Indonesia's now democratized and decentralized governance, this had important implications for the management of the boom and its distributional consequences.

¹³ The most detailed studies of effective protection are by Fane and Condon (1996) and Marks and Rahardja (2012). Basri (2001) provides a comprehensive political economy analysis of trade protection during the Soeharto era. Patunru and Rahardja (2015) examine the political economy of trade policy during the democratic era. See also Pangestu et al (2015) for a general survey.

¹⁴ There was of course considerable – if poorly documented – off-budget activity, mainly in the military and later among the Soeharto family business empires. This had distributional rather than macroeconomic consequences, in

to the Ministry of Finance, but its goal of keeping inflation under control was facilitated by fiscal prudence. Unusually in that era, the international capital account was opened, both to restore the country's reputation in global capital markets (on the premise that capital would be more likely to enter the country if it was free to leave) and as a check on government excesses.¹⁵ A fixed but adjustable exchange rate regime was adopted.¹⁶

These settings underpinned almost three decades of rapid growth. They unraveled only during the AFC, when a combination of circumstances resembling a 'perfect storm' occurred.¹⁷ By the early 1990's mobile capital to emerging markets in search of higher yields was rising. Indonesia looked very attractive. It still had an open capital account, and by the late 1980's it had implemented far-reaching but incomplete financial liberalization, both in the banking sector and the stock market. But its policy settings were problematic in two respects: the fixed but adjustable exchange rate was not able to adapt to the very large short-term capital inflows then occurring,¹⁸ and financial sector supervision was lax.¹⁹ When Thailand got into difficulty in July 1997, having exhausted its reserves in defence of the Baht, the contagion quickly spread around the neighbourhood. Indonesia initially looked secure – its fiscal position was sound and its current account deficits were smaller than Thailand's. However, its financial institutions were highly vulnerable to the sudden exodus of capital, exacerbated by several key policy missteps as the crisis took hold.

the sense that the activities did not cause any significant increase in fiscal deficits. It is estimated that perhaps only one-third of military revenue came from official sources. Much of it came from illegal exactions on firms and wealthy households (mainly the ethnic Chinese community) and privileged licensing facilities in lucrative areas such as forestry and trade.

¹⁵ The Mundell-Fleming 'impossible trinity' was not violated, essentially because the domestic financial sector was in its infancy, and the only capital flows of any significance were government borrowings and foreign direct investment.

¹⁶ See Woo et al (1994) for an examination of Indonesian macroeconomic policy through to the early 1990's.

¹⁷ There is a very large literature on Indonesia and the AFC. See for example the four-monthly 'Surveys of Recent Developments' in the Bulletin of Indonesian Economic Studies, and McLeod and Garnaut (eds, 1998), Corden (2007) and Ito (2007), and Arndt and Hill (eds, 1999).

¹⁸ If allowed to float, the Rupiah would almost certainly have appreciated, as it did on each occasion that the narrow official trading band was slightly widened. A reasonable conjecture is that an appreciating Rupiah would have slowed growth and exerted a cautionary effect on unhedged foreign currency borrowings, both responses in all likelihood moderating the subsequent economic crisis.

¹⁹ Cole and Slade (1996) provide a detailed (and largely positive) examination of Indonesia's extensive but incomplete financial liberalization prior to the AFC. On the connections between the financial sector and the Soeharto family business interests, see the insightful study of the major Indonesian business conglomerate of that era by Borsuk and Chng (2014). The key point to note during the crisis was that both 'crony' and 'professional' banks collapsed.

Crucially, the formerly very close relations between the Soeharto government and the International Monetary Fund (and hence the bilateral donors) deteriorated to the point of being dysfunctional.²⁰ The economy then went into free-fall, the banking sector collapsed, and the Rupiah-dollar exchange rate fell from Rp2,500 to at one point Rp17,500. In May the following year the seemingly impregnable Soeharto presidency collapsed. The country's economic and political prospects then appeared exceptionally gloomy.

In the event, Indonesia (and its most affected neighbours, Malaysia and Thailand) came through the crisis surprising quickly. Unexpectedly a functioning democratic system was constructed amazingly quickly. The bank and corporate bailouts were extremely costly, and the new, weak democratic regime had to manage a public debt equivalent to about 100% of GDP, an almost four-fold increase over the pre-crisis figure. New macroeconomic rules had to be developed quickly. Bank Indonesia was given autonomy (a positive outcome from the IMF LOI) and the floating exchange rate regime, which had been forced on the government during the crisis, was maintained. A Fiscal Law was enacted in 2003, with the government essentially adopting the Maastricht principle of a maximum 3% (of GDP) fiscal deficit and 60% public debt. A major driver of the reform was that it facilitated early exit from the deeply unpopular Fund conditionality. Moreover, unlike the European Union, Indonesia stuck to its budget rule. Fiscal discipline, economic growth and (modest) asset recoveries led to a successful fiscal consolidation, with public debt falling to around 25% of GDP by the end of that decade.

Figures 7 to 9 show these macroeconomic outcomes since the 1960's. They demonstrate how quickly inflation was brought under control in the late 1960's, and it has remained so ever since, apart from a brief episode of near-hyperinflation in 1998. Fiscal prudence is also evident, as shown by the continuously modest deficits. But in addition the data also point to substantial remaining challenges. For most of the Soeharto and early democratic periods, inflation has arguably been too high. One result is the constant need for nominal exchange rate depreciations to restore competitiveness (Figure 7). As Figure 8 shows, the Rp/\$ exchange rate has declined from about Rp400 to below Rp12,000 over a 50-year period. The government has also struggled to develop a revenue base that is sufficient to provide the goods and services that the community expects (Figure 9). This is especially so in periods of low commodity prices, such as at present when the tax effort is just 12% of GDP and tax buoyancy is less than unity. Persistent and misdirected subsidies, especially

²⁰ A major early mistake was the sudden closure of several banks without adequate explanation or support. This triggered a generalized bank run. The various IMF Letters of Intent (LOI's) were also highly onerous and complex. Both the Soeharto presidency and the IMF made major mistakes over this period. Stiglitz (2002) offers a stridently critical assessment of the IMF, while Boughton's (2012, chapter 11) semi-official history presents the IMF case. Bluestein (2001) provides an interesting and balanced assessment. See also the references in footnote 17, especially Corden and Ito.

for petroleum products and electricity, have further squeezed government capacity while having perverse distributional consequences.²¹

Figure 8: Inflation and Exchange Rate, 1960-2016

Figure 9: The Budget, 1960-2016

7. Sub-National Development Dynamics

Regional (subnational) development dynamics and disparities matter more to Indonesia than most countries. Historians emphasize that arbitrary lines drawn on an imperfect map centuries ago in far-off European capitals in effect created this ‘improbable’ nation. Indonesia shares a land or maritime border with six countries. Historically, parts of the country were more closely connected with these neighbours than with the rest of the country. At several junctures throughout its history the possibility of territorial disintegration was very real. Current policies therefore need to be judged in this light. There are also analytical issues related to domestic economic integration and to subnational comparative advantage reflecting the country’s unusual economic geography: the central island of Java has just 6% of the country’s land area but about 60% of its population and economic activity, and a near monopoly of national political power.

The map provides a picture of the subnational mosaic, presenting summary statistics for the country’s 33 provinces.²² Several features are immediately apparent. First, per capita incomes vary enormously, with the capital, Jakarta, and some resource-rich regions (such as East Kalimantan) much richer, by a factor of about six, than the poorer regions, mainly located in Eastern Indonesia. If these data were presented for the approximately 500 kabupaten, the district below the provinces and to which the major public sector resources flow, the differential is far greater, about 50:1. Regional poverty incidence and, to a lesser extent, other social indicators, are quite highly correlated with per capita income. Even after adjusting for regional price differences, poverty is very low

²¹ The electricity and fuel subsidies have been particularly serious, occasionally reaching 4% of GDP, more than one-quarter of the total budget, during periods of high international oil prices when the domestic price has remained fixed. These subsidies have declined during the current administration, but there is no certainty that they will not return in a future era of high commodity prices. They are not justified on efficiency, equity or environmental grounds (Burke and Kurniawati, 2018).

²² In the democratic era the number of subnational political units has increased quickly, reflecting both the assertions of local identity and implicit fiscal incentives to carve out new regions. The proliferation has been particularly rapid at the kabupaten (sub-provincial) level, with the number almost doubling. The number of provinces has also increased, from 26 pre-crisis (that is, excluding the former East Timor province) to 34 currently. The statistical database used in the map does not yet incorporate the newest province, North Kalimantan.

(less than 10%) in the richer provinces and stubbornly high (above 20%) in the poorer ones.²³

Map: The Sub-National Socio-Economic Mosaic

The result of these subnational differences is quite pronounced regional comparative advantage and specialization. Indonesia has a single exchange rate, uniform national laws²⁴ and few restrictions on the movement of people and goods. But as would be expected, most of the manufacturing and higher value services are located on Java, with its larger markets, stronger human capital base and proximity to national government. Off-Java the major activities tend to be agriculture and mining, and the manufacturing processing and services that support them. As a result of these large differences, almost every major economic event and policy has subnational consequences. For example, protection for manufactures is implicitly a subsidy for Java. As we have seen, the AFC led to a sharp exchange rate depreciation which mainly benefited off-Java agricultural exporters. The Dutch Disease effects of commodity booms benefited the commodity exporters off-Java, but they also squeezed the Java-based manufacturers.

At the time of independence Indonesia inherited very large regional inequalities. As best as can be measured – regional accounts have only been produced since the mid 1970's – interregional inequality has remained high but reasonably stable ever since (Hill and Vidyattama, 2016). Given the centrifugal economic forces at work, in some respects this is a significant achievement, especially as regional inequality is either higher or has been increasing in the other developing giants, such as Brazil, China and India (Milanovic, 2005). The stability reflects a combination of factors, including central government subsidies that have mildly favoured poor regions, migration from poorer to richer regions (which unlike China is unrestricted), and the resulting remittance flows.²⁵

Paradoxically, at various times the fear of territorial disintegration has been the motive for both centralized and decentralized governance. During the 1950's several regions attempted to secede from Jakarta's rule. Then the military-backed Soeharto regime, determined to keep a firm grip on these regions, and other restless outlying provinces such as Aceh, East Timor (as it then was) and

²³ There are two caveats to the assertions in this paragraph. First there are a few regions, most notably the two Papua provinces, where resource enclaves in traditional subsistence economies are of such scale that they result in high provincial income surrounded by high levels of poverty. Thus non-mining regional GDP per capita is a better measure of economic welfare in these cases. Second, there are several poor regions which, for a variety of social, cultural or historical reasons, have above average educational achievement. See the papers in Hill (ed, 2014) for an examination of these issues.

²⁴ Except for one province, Aceh, where Shariah Law has now been introduced.

²⁵ Note that if inequality is measured at the kabupaten level, however, the picture is less reassuring. Nevertheless, the data are available for a shorter time span and frequent border changes complicate empirical estimations.

Papua, maintained tight centralized control. However, in 1999, as East Timor voted to secede and civil war intensified in Aceh, the government rushed through a ‘big bang’ decentralization reform, that allocated, mainly on an unconditional basis, about one-third of the national government’s budget to the kabupaten, which were then also able to elect their own governments. Because the decentralization was so hasty, and implemented by a national government grappling with the biggest economic and political crisis in the country’s history, the reform could be judged either a success, as it achieved the aim of maintaining the nation state (Mietzner, 2014) or one that had limited tangible effects other than enriching local elites (Sjahrir et al, 2014). Certainly there is little evidence to date of improved local service quality (Lewis, 2014).

Almost two decades after this major decentralization program, Indonesia is still struggling to develop an effective relationship between central and subnational governments. The latter now spend about one-third of the consolidated state budget. But they have made little effort to raise their own revenue sources, which account for only about 15% of their total receipts. The result is a major vertical fiscal imbalance and persistent shirking of expenditure responsibilities. The relationship between the major subnational tiers of government, particularly the provinces and districts, also remains ill-defined. These problems arise from incoherent incentives and frequent modification of the regulations governing fiscal flows and expenditure responsibilities (Lewis and Smoke, 2017).

8. Living Standards²⁶

Compared to the 1960’s, the Indonesian people are now very much better fed, educated and housed, and they generally live longer, healthier lives. These improvements have been overwhelmingly driven by economic growth, but there have in addition been beneficial policy interventions, particularly in education. There have been costs too: Indonesia is now a more unequal society (to regard this as a ‘negative’ is of course a value judgement) and, as we shall see in the following section, environmental amenities have mostly deteriorated.

Poverty incidence has fallen quickly. The ‘headcount poverty’ measure, that is, the percentage of the population with estimated consumption below some sort of acceptable minimum standard, has fallen from about 60% to 11%. Figure 10 presents the official estimates for the period 1976-2017. Before 1976 the data are incomplete, but as Booth (1992, pp. 342-345) and others have shown, on the basis of fragmentary but plausible data, there was a significant decline in poverty incidence in the decade prior to the mid 1970’s. Note that the data in Figure 10 present two series, as in 1996 the official poverty line was revised upwards. As is evident in the data, changes in poverty incidence follow economic growth quite closely. Thus the one major interruption to the process of declining poverty occurred during the AFC, when poverty incidence rose by more than one-third. Poverty then fell quite quickly as growth resumed.

²⁶ Thanks go to Anne Booth and Asep Suryahadi for helpful discussions on some of the material in this section.

Figure 10: Poverty and Inequality, 1976-2017

There is a very large literature on the interpretation and quality of these data.²⁷ Collecting accurate data from a sprawling archipelago with inaccessible regions, pronounced seasonality in incomes, a large informal sector, and still quite extensive non-monetized activities is extremely difficult. During the crisis years, the statistical agency struggled to maintain the quality of its field enumerations. The extremes of the distribution tend to be underestimated, hence probably understating poverty incidence (and also inequality, see Leigh and van der Eng, 2009). Income is recorded less accurately than expenditure, which is a problem in measuring income inequality (and for inter-country comparisons), but not for expenditure-based poverty estimates. The wealth data are more limited still. Nevertheless, in spite of these and other caveats, the overall conclusion of a major decline in poverty incidence has not been seriously questioned.

Having established this basic proposition, a host of analytical, measurement and philosophical issues arises. We canvas some of these briefly.

First, poverty lines are arbitrary constructs, at best based on some scientific estimate of minimum human physical needs. Moreover, community living standards change, especially over several decades and in the presence of rapid growth. A poverty line suited to the Indonesia of the 1960's, characterized by very widespread destitution, is not suitable for current-day middle-income Indonesia. This is clearly illustrated in Figure 10, when the upward revision in the official poverty line in 1996 increased the headcount poverty estimate by 50%.

Second, expenditures of most Indonesians are clustered around the poverty line, that is, they are either 'near poor' or 'poor'. This has two implications. One is that the poverty estimates are highly sensitive to the selection of the poverty line. For example, according to World Bank estimates (www.povertydata.worldbank.org), in 2015 the headcount poverty estimate was 6.8% if using the 'international poverty line' (of \$1.90 per day, PPP) but 31.4% if using the 'lower middle-income poverty line' (of \$3.20). Another implication is that there is extensive churning in poverty incidence. That is, relatively minor interruptions to earnings or unexpected windfalls can push people out of and into poverty. For example, using panel data, Suryahadi et al (2011, pp. 74-76) showed that 53.3% of the people who were classed as poor in 2008 moved out of poverty in 2009, while almost half the people who were classified as poor in 2009 were not poor in 2008.

²⁷ In addition to the material cited below, illustrative of this literature, and also containing extensive citations to earlier research, see Suryahadi, Hadiwidjaya and Sumarto (2012), and papers in the August 2014 issue of Bulletin of Indonesian Economic Studies by Priebe, Sumner and Edward, De Silva and Sumarto, Yusuf, Sumner and Rum. See also Ravallion (2016) for a comprehensive general overview and analysis of the poverty literature.

Third, at the household level the correlates of high poverty incidence are well-known (see references cited in footnote 27) and generally accord with international experience. Key correlates of higher poverty incidence include female-headed households, the occupation and education of household heads, the agriculture sector, and the occurrence of unanticipated shocks such as loss of earnings, serious health events and major natural disasters. As would be expected also, poverty is generally (but not always) significantly higher in poorer regions, especially in Eastern Indonesia.

Fourth, with regard to policy, the data clearly show that the most important poverty alleviation strategy has been high growth. But the type of growth also matters. Poverty appears to have been more responsive to growth when it has been labour-intensive, and therefore more inclusive, for example in labour-intensive manufacturing and most agriculture. Broad-based education programs have been crucial, as discussed shortly. In addition, since the AFC the government has begun to introduce various targeted social safety net (SSN) programs (World Bank, 2016). For poor families, these have included subsidized rice, scholarships, health insurance and conditional cash transfers. The operation of these schemes has been facilitated by the rapid advances in mobile and internet banking, and local-level democracy. The programs are still modest in scale, effective monitoring is still work-in-progress and targeting outcomes are mixed. But program quality is improving and lessons are being learned.

Education and health indicators have also improved significantly over this period. This can be seen by comparing changes in the same set of socio-economic indicators for the four countries presented in Table 1 for around 1960 for 2015, that is, approximately two generations later (Table 2). The average Indonesian can now expect to live more than two decades longer, adults receive six additional years of schooling (resulting in near universal adult literacy), and babies are now six times less likely to die before their first birthday. Indonesia is closing in on its middle-income neighbours even as they too have achieved significant improvements in social indicators. In its social outcomes, therefore, the Indonesian record more closely resembles that of East Asia than most of South Asia or the Islamic world, where major education deficiencies persist.

Table 2: Comparative Socio-economic Conditions 2015

So much for the positive story. Major gaps remain. In education, Indonesia has prioritized quantity over quality.²⁸ Given the historical backlog and the limited resources, choices had to be made, and there is a strong case on both equity and efficiency grounds for going universal at lower quality over higher quality but incomplete coverage of the population. Most international test comparisons – such as the TIMSS and PISA – rank Indonesia poorly among middle-income economies. A similar outcome is evident in universities, where the emphasis on quantity has resulted in no Indonesian universities being ranked within the top

²⁸ This paragraph draws substantially on Suryadarma and Jones (eds, 2013), the most comprehensive recent study of education in Indonesia.

100 for Asia. Again, history matters, as there were estimated to be only 2,000 university graduates at the time of independence.

The socio-economic correlates of education performance highlight another major challenge. In 2009, 29% of 16-18 year-olds in the poorest household expenditure quintile were enrolled in senior secondary school compared to 73% in the richest quintile. Moreover, the latter would almost always attend school of superior quality (Suharti, 2013, p. 215). There are also large regional differences in these percentages, ranging from 48% to 87%. One important policy initiative was the 2002 constitutional amendment that requires central and local governments to spend at least 20% of their budgets on education. With the financial resource constraint much reduced, the issue now is to translate the funding into better educational outcomes.

A similar story is evident in the health sector. As noted, from a very low base health indicators have improved rapidly. However, public policy has not been as effective as in education. Public health facilities have until recently been rudimentary. Public spending has remained very small, although it is now beginning to rise in response to a constitutional mandate of 5% budget spending. Moreover, the spending has not been directed as efficiently and equitably as in education. The construction of modern hospitals caters mainly to better-off urban residents, while there has been underinvestment in rural and preventative health facilities. The 5% budget requirement will at least remove some of the financial limitations. However, supply-side constraints (for example, the training of medical personnel) and the political preferences for 'high-end' medicine will still need to be addressed. As with primary and secondary education, much of the delivery is now undertaken by the more than 500 local governments, resulting in spatial outcomes that are highly variable.

There are also pronounced gender gaps in education, the labour market and societal power structures, although these gaps are smaller than for practically any other Moslem country, and Indonesia does not have the severe gender birth disparities evident in China and India. There is very little difference in literacy rates, while enrolment rates at all levels of schooling across genders are narrowing. In 2010 males received on average about 0.8 more years of schooling than females (Suharti, 2013, p. 18). At the tertiary level, female enrollments now actually exceed those of males, although in some conservative regions restrictions on the ability of women to access preferred education opportunities (and later employment) remain substantial. Female labour force participation has also risen since the 1960's, especially during the manufacturing export boom, when younger women were drawn into the factories in large numbers. However, it has stalled in recent years (Manning, 2014).

Although there are few formal barriers to female workforce participation, the gender earnings gap remains significant (Taniguchi and Tuwo, 2014). In the formal labour market, the hourly female wage is 70-80% that of males. In the informal sector, reliable hourly data are limited, but the gap is likely to be larger. The usual set of factors appear to be the main explanators: occupational specializations, greater mobility freedom for males, disrupted employment

patterns for women owing to child birth and raising, and, as informal extended family arrangements weaken, limited formal child-care support facilities. Broader societal power structures reinforce these outcomes: only 20% of the members of the national parliament are women, while only two women are in the 2016 Forbes list of the 50 richest Indonesians, ranked at 37 and 44.

Inequality as measured by the gini ratio was broadly stable and relatively moderate during much of the Soeharto era (Figure 10). It was low prior to the growth takeoff in the late 1960's. Much of the colonial era plantation and mining enclaves had been nationalized, there was little high-end service and manufacturing activity, while most of the workforce was engaged in smallholder rice and estate crop production, along with petty trade and other informal service sector activities. Then rapid growth, much of it rural and agricultural, ensured a reasonably egalitarian growth path for the ensuing 20 years. This occurred in spite of both the centralized political and patronage regimes and the 1970's oil boom. The major 1980's fiscal adjustment to lower oil prices also had little impact on inequality, as the expenditure reductions were carefully targeted (Thorbecke, 1991). In addition, the export-oriented strategy was creating many new employment opportunities in labour-intensive industries.

As Figure 10 shows, inequality began to increase in the 1990's as major business conglomerates, many linked to the Soeharto family, extended their reach. By the mid 1990's, Indonesia had the highest level of business concentration in the nine developing East Asian economies for which Claessens et al (2000) were able to obtain data.²⁹ Firm-level seller concentration was also high (Bird, 1999). In addition, high-income urban-based services were growing very fast, especially following the 1988 financial deregulation. The AFC reversed this trend significantly but temporarily. This was a crisis in the modern urban economy. The rural economy held up quite well, resulting in reverse migration out of the cities. Export-oriented agriculture benefitted from the very large exchange rate depreciation.

Inequality began to rise again quickly during the democratic era, with the gini ratio increasing by almost 10 percentage points in the first decade of the 21st century, one of the fastest increases in developing Asia over this period (Warr, 2015; World Bank, 2016). The database does not permit a full decomposition and identification of the factors that explain this increase. But the following are likely to have been the key drivers. First, as noted below, the new labour market regulations increased inequality in labour market outcomes. Second, the public sector commitment to egalitarian outcomes arguably (and unintentionally) weakened, especially as the earlier, equalizing education expenditures diminished in importance. The very small social expenditures were insufficient to compensate for these changes. Third, the changing economic structure, particularly the growth of more capital-intensive services sectors, further increased income disparities. Fourth, the second commodity boom had more unequalizing distributional effects than the first one. The former was almost entirely in the oil and gas sector, and the major beneficiary, apart from foreign

²⁹ They found that the top 10 corporations owned 58% of corporate assets; six of the top 10 were very closely connected to the Soeharto family.

shareholders, was the government, which as noted distributed the proceeds reasonably equitably. In the second boom, occurring approximately over the period 2004-14, the major beneficiaries were in the private sector, particularly the owners of factors of production in coal and palm oil, the proceeds of which were lightly taxed.^{30 31}

Accompanying this rapid socio-economic development have been profound demographic changes (Jones, 2015). Indonesia, Java in particular, was seen as a 'Malthusian' candidate in the 1960's. A leading demographer of that era described Java as 'asphyxiating for want of land' (Keyfitz, 1965). According to one gloomy but influential study, population pressures were then seen to be reinforcing the deep-seated poverty in rural Java (Penny and Singarimbun, 1973). In fact, Indonesia has subsequently managed its demographic challenges quite effectively. Fertility and mortality rates have both fallen quickly, resulting in a largely stable population growth rate. The Soeharto regime in particular pioneered an innovative family planning program that overcame resistance from conservative religious quarters (Hugo et al, 1987). The result is that the country continues to enjoy a demographic dividend, a window that will remain open for about the next 15 years, providing sufficient time for governments to introduce pension, healthcare and other reforms in preparation for an ageing society.

Labour market structure and conditions reflects these various social, economic and demographic changes, as mediated by the policy environment.³² The rapid structural change observed above had its counterpart in the labour market, with labour shifting out of low productivity agriculture into industry and services. The labour market transitions have occurred more slowly, as is usually the case, resulting in widening inter-sectoral labour productivities. The labour market has also become more formal, more urban, older, and (slowly) more female. Interregional labour market mobility has also increased as transport and communication facilities have improved. People have moved to Java in search of better education and employment opportunities, and to resource-rich regions off-Java in search of higher wages. Unlike China and to a lesser extent India, there are very few formal restrictions on labour mobility.

Democracy ushered in a significant change in the labour market policy regime. During the Soeharto era the labour market was relatively unregulated and independent trade unions were suppressed. But productivity and wages grew quite strongly, especially during the 1980's when the country embarked on a labour-intensive, export-oriented industrialization strategy. Over this period, the

³⁰ See World Bank (2016) for discussion of some of these issues.

³¹ In passing, comprehensive Indonesian wealth statistics and the distribution of wealth are not yet available. On the basis fragmentary evidence, and as part of its international wealth comparisons project, Oxfam has estimated that the wealth holdings of the four richest people in the country are similar to that of the poorest 100 million citizens.

³² This and the following paragraph draw on the extensive writings of Chris Manning. See for example Manning (1998) on the Soeharto era, Manning (2014) on the democratic era, and the references cited therein.

Indonesian experience was similar to that of its high-growth authoritarian neighbours. The resultant labour market flexibility also resulted in poverty falling less than might have otherwise been the case during the AFC: the labour market impacts impacted more heavily on price (that is, real wages) than on quantity (that is, employment). But democracy then led to increased labour market populism. Although there was a welcome increase in worker freedoms, regulated minimum wages rose rapidly, and the government introduced among the most onerous severance pay requirements in developing Asia. The result has been much slower formal sector employment growth, increased dualism between the relatively well-off and protected formal sector alongside the vast informal sector characterized by low earnings and insecurity, and increased wage inequality. It has also arguably delayed the transition from Lewis-style surplus labour to the tighter labour market conditions evident in Indonesia's more advanced neighbours. In addition, for the first time Indonesia became a significant labour exporter, with about 5 million people working abroad, mostly in unskilled and semi-skilled occupations. Mismatches between the labour market and the education system have further exacerbated these the problems of underemployment and wage inequality, with the rapid growth of high school and diploma graduates, many of indifferent quality, and with employment expectations that are unlikely to be realized.

9. Environmental Dimensions³³

Indonesia is a classic case of the Environmental Kuznets Curve (EKC) in action. Like its neighbours, over time most environmental indicators have regressed (Resosudarmo, ed, 2005). The factors driving these outcomes are well known. Society's implicit preferences have been for rising material welfare and for not fully internalizing the cost of the externalities created by environmental degradation. Moreover, institutions are not yet strong enough to represent the public interest (including the global public interest) in ameliorating the destruction of the 'commons', including the nation's vast forest and marine resources, upland soil cover, and urban (and peri-urban) air quality.

Environmental deterioration is everywhere evident, some of which is already having a major impact on everyday life in the country. The capital city, Jakarta, is experiencing ever more serious flood problems during the rainy season, owing to rising sea levels and excessive pumping of ground water. By some estimates, as much as one-quarter of the current city area will be subject to regular and severe flooding by 2030 (Álvarez and Resosudarmo, 2017). Fatal mudslides are occurring frequently, as a result of upland deforestation and unchecked population settlements. The forest cover is receding rapidly, often replaced by mono-crop agriculture (much of it the booming palm oil plantings), accompanied by unsustainable pesticide and fertilizer use. The loss of forest cover is also leading to a loss of flora and fauna species that are unique to

³³ Thanks go to Paul Burke and Budy Resosudarmo for helpful discussions on some of the material in this section.

Indonesia.³⁴ There is rampant and largely unchecked over exploitation of the country's vast maritime resources, especially its fisheries. The fragile (and potentially very productive, for aquaculture and tourism) marine ecology is also being destroyed. Urban air quality is not as poor as that of the major Chinese and Indian cities, but it too is deteriorating, exacerbated by the almost complete reliance on petrol-driven (and often poorly maintained) engines, in buses, cars and motorcycles.³⁵ Notwithstanding the frequent flood events, paradoxically, increasing areas of Indonesia are experiencing 'water stress' as a result of extended drought periods, poor management of river systems, and rapid, unplanned urbanization.

These environmental problems have global ramifications. During prolonged dry seasons caused by El Nino weather events, the cut-and-burn agricultural technologies that have been employed for a millennia result in massive fires, exacerbated further by the ongoing deep-level burning of peat lands. Particularly during years of prolonged dry seasons, Indonesia is actually the world's fourth largest CO₂ emitter. The palm oil boom in recent decades has accelerated this process. In these periods also, air quality becomes so toxic as to be injurious to health. At its most serious, it has disrupted civil aviation, including in neighbouring Malaysia and Singapore. Indonesia is therefore a significant player in international climate negotiations. Thus far it has adopted the position common to most developing countries, of being a willing participant in these negotiations within the context of phased-in global emission reductions, and seeking compensation from richer countries in exchange for improved forest management (Seymour and Busch, 2016).³⁶

Measuring these impacts is not easy. There are few reliable long-term environmental statistics. As an illustration, Figure 11 shows trends in three key indicators, deforestation, CO₂ emissions and sulphur emissions.

Figure 11: Deforestation and Emissions Indicators

One approach to quantifying this environmental deterioration is by attempting to measure some sort of 'Green National Income', that subtracts from GDP an estimate of the depletion of non-renewable mining and energy resources, the degradation of otherwise renewable resources such as forests and fisheries, and the loss of other environmental amenities. An early set of estimates

³⁴ Indonesia's forests rank first in the world in endemic birds and mammals and sixth in endemic amphibians (Alisjahbana and Busch, 2017, p. 122).

³⁵ See for example ADB (2010) and http://www.who.int/phe/health_topics/outdoorair/databases/cities/en/ for some comparative data. Among three major developing Asia capitals, Beijing, Delhi and Jakarta, the latter is perhaps fortunate owing to its immediate coastal location and the absence of winter heating requirements.

³⁶ Indonesia was an early signature to REDD, an international instrument to incentivize emission reductions, through improved forestry management. It signed a \$1 billion LOI with the Norwegian government in 2010, but implementation progress to date has been very slow (Alisjahbana and Busch, 2017, pp. 124-128).

prepared by Repetto et al (1989) found quite a large divergence between GDP growth and an alternative 'green growth'. However, the estimates were highly sensitive to prices used, the depletion rates, and the discovery of new mineral resources.³⁷

In the final analysis, improved environmental outcomes will be achieved when community preferences force policy makers in that direction. There is some slow progress. Mass rail transit in Jakarta and other major cities is belatedly under construction. The rising incidence of catastrophic environmental events is elevating the political importance of the issues. Indonesia already has a very active environmental movement, and the democratic space to mobilize public support. Satellite and other surveillance technologies enable environmental activists to better monitor forest loss and maritime exploitation. The gradual phasing out of fossil fuel subsidies will encourage greater fuel efficiency. At the margin, international assistance can make a contribution. Sustainable forest practices are gaining more support. Greater environmental awareness in richer neighbours, most importantly China and Japan, has potentially powerful demonstration effects.

10. Institutions and Governance

What role have institutions and systems of governance played in these generally good development outcomes? What light does the Indonesian evidence shed on the notion that 'institutions rule' (Rodrik, ed, 2003)? Is there any evidence that they have led (or lagged) economic development? How has the transition from authoritarian rule to democracy impacted on processes and outcomes?

The first point to note is that Indonesia's formal institutions are generally weak and embryonic. During the authoritarian era, political scientists observed that 'Soeharto was the institution' (Mackie and McIntyre, 1994; McIntyre, 2003), in the sense that he or his close associates were the ultimate arbiters on any major policy issue or commercial decision. During the democratic era, political power has obviously been more diffused, and decentralized, and therefore the formal institutions of the state have become more important. But although the policy making modalities have differed, in both periods the country's political leadership has been more or less committed to economic development, reinforced by the political imperative to achieve rising living standards that are broadly comparable to those in the high-growth neighbours. The result has been, for most of the five decades, a commitment to prudent macroeconomic management, to moderately open commercial policies, and to social progress.

Social scientists have struggled with attempts to measure institutional quality, let alone establish causal relationships, especially in developing countries. Table 3 presents some of the most widely used comparative indicators of institutional quality, for Indonesia, the two Asian giants, and two middle-income

³⁷ See Nurkholis, Resosudarmo and Hartono (2007) for a more recent set of tentative estimates.

neighbours. They are at best indicative, based mainly on subjective survey material, and in some cases regarded as somewhat political exercises, especially in the case of the World Bank's Ease of Doing Business (EODB) results. These indicators are not available for the longer time period covered by this Survey. We therefore present them for the longest time period available for each series. This generally coincides with Indonesia's transition from authoritarian to democratic rule, and so at least it enables some sort of comparative assessment of progress during the democratic era. The number of countries surveyed varies over time, and so the results are reported as ranks (x/y).³⁸

Table 3: Comparative Institutional and Governance Indicators

The major conclusion from these data is that Indonesia's ranking more or less corresponds to that of its relative per capita income. That is, most of the governance indicators suggest that institutional quality has neither lagged nor led the country's economic development. But there is considerable variation over time, which is broadly indicative of the changes that have occurred during Indonesia's transition from authoritarian to democratic rule. For example, the CPI data conclude that the country is now considered to be relatively less corrupt than was the case in the mid 1990's, although other comparisons dispute this conclusion. Indonesia's logistics quality (LPI) continues to lag most countries, and there has been no improvement over the past decade. The country is obviously now more democratic (WGI-V&A), although the political system is in its infancy. Government effectiveness (WGI-GE) has improved somewhat, but it is well behind China, and also India. Controversially, the business environment (EODB) has reportedly improved, and is even ahead of China. Each of these indicators, and many more like them, could of course be unpacked in much greater detail. But together they provide at least an indicative composite picture.

These are highly aggregated measures. To gain insights into how institutions have shaped policy processes and development outcomes, it is useful to briefly examine some case study material. We select three important areas for illustrative purposes.

The first area concerns policy reform. At a general level, there are the common elements in both periods that are widely discussed in the literature (see for example Krueger, ed, 2002): actual or potential economic crises force or embolden leaders to reform; the power of 'good ideas' may triumph; and

³⁸ The following data sources and acronyms are used:

Transparency International, Corruption Perceptions Index (CPI).

World Bank, Logistics Performance Index (LPI).

World Bank, EODB.

World Bank, World Governance Indicators, Voice and Accountability (WGI-V&A).

World Bank, World Governance Indicators, Government Effectiveness (WGI-GE).

idiosyncratic factors including in particular the occasional ascendancy of reform-oriented personalities. But there is also a clear distinction between the authoritarian and democratic eras in some policy reform processes. The response to commodity booms and bust illustrate the differences.

During Indonesia's two major commodity booms of the last half-century, the forces of economic nationalism have intensified, resulting in more inward-looking commercial policy and greater direct government economic intervention (in state enterprises, subsidized credit and so on). As the boom faded, the response differed between the periods. During the 1980's, the 'technocrats' (that is, the key economics ministers, mostly from the University of Indonesia) were able to persuade the president that, without major reform, an economic crisis was imminent. Soeharto was in 'supreme control', and thus the key objective of the technocrats was to persuade him of the case for reform. Once achieved, reform proceeded quickly and effectively. This was a case of 'low politics', in the words of Soesastro (1989).³⁹ The technocrats avoided 'grand ideological debates', which they probably would have lost anyway.

Reform has been more difficult as the second commodity boom ended, even with a somewhat insulated technocracy. The legislature is now considerably more powerful relative to the executive. Reformers have to engage in public debates and win over (mostly skeptical) constituencies, often proceeding with a succession of small steps.⁴⁰ The result has been slow and often incoherent reform (Patunru and Rahardja, 2015). The conclusion from these two episodes is that reform is therefore faster under authoritarian rule. But this is not a generalizable proposition: unchecked authoritarian rule brings with it the risk of major policy mistakes, and in any case the reforms could be undone if they were perceived to be undertaken by a regime that is lacking in political legitimacy, in the event that the regime is overthrown.

The second issue concerns the persistence of corruption, defined in the narrow sense of the use of public office for private gain.⁴¹ As Table 3 shows, this has been a major challenge for Indonesia throughout its history. Its form has also changed in response to different governance structures and policy regimes. For example, it was heavily concentrated around Soeharto and his circle during the authoritarian era,⁴² while during the democratic era it has been more widely diffused. Also, the 2001 decentralization reform transferred considerable administrative and financial authority to subnational governments, and corrupt practices therefore similarly devolved, particularly in resource-rich regions.

³⁹ See also Azis, 1994; and Basri and Hill, 2004.

⁴⁰ The 'small steps' argument is advanced in a reflections piece by former finance minister Chatib Basri (2017).

⁴¹ That is, we put aside the broader issue of 'rent-seeking', defined in the Krueger (1974) sense of lobbying for personal gain through protection, political donations, infrastructure expenditures and so on.

⁴² McLeod (2011) for example refers to the 'Soeharto franchise' to draw attention to this concentration. Fisman (2001) creatively attempted to show the value of the Soeharto connection by examining relative share price movements in Soeharto-linked companies during the AFC.

Moreover, the major 1980's trade reforms had cleaned up much of the trade regime, especially through the removal of (more corruption-prone) non-tariff barriers, with the consequence that corruption tended to migrate from the traded to the non-traded sectors. Corruption has also tended to proliferate during commodity booms since in times of prosperity there is less pressure on governments for accountability.

Nevertheless, while corruption has had adverse distributional consequences, and it corrodes trust in institutions, contrary to popular opinion Indonesia's economic progress over the past half-century indicates that corruption has not fundamentally held the country back. As Table 3 illustrates, Indonesia is not an outlier with regard to corruption. The co-existence of rapid economic development and corruption is of course a general Asian story, and a feature of both authoritarian and democratic regimes. The central explanation for the co-existence is not that corruption is conducive to growth⁴³ but that these regimes have enough 'growth-promoting' policies to overcome its negative effects.

The literature on corruption in Indonesia more or less parallels that for other countries, taking account of country-specific features of the type noted above.⁴⁴ An analytical framework that combines simple supply and demand analysis with the country's political economy framework sheds light on the issue. The country's complex regulatory regime, evident in Table 3 above, both empowers office-holders and incentivizes firms to short-circuit the system. A poorly remunerated civil service with lifetime employment enhances the likelihood that bureaucrats will be open to bribery. Jobs in the more lucrative sections of the civil service, such as customs and the police, continue to be 'purchased'. Institutions that are designed to protect the public interest, including the legal system, are still rather weak. Therefore the likelihood of detection and the penalties for malfeasance are generally low. Civic morality at the top also matters – the more there are senior officials and political leaders living lavish lifestyles on officially modest incomes, the greater the temptation for their underlings to follow their example.⁴⁵

Democracy has had three major effects on corruption in Indonesia. First, there are the distributional effects noted above. Second, Indonesia now has an independent anti-corruption commission (known by its acronym, KPK) that has the power to undertake both investigations and prosecutions. It is the most

⁴³ Although there is a literature, of some relevance to Indonesia, arguing that it might be in some cases, in overcoming stifling regulations, on the premise that (to paraphrase Milton Friedman) 'corruption is the intrusion of the market into a controlled economy'.

⁴⁴ See Kis-Katos and Schulze (2013) for a comprehensive survey of corruption in Southeast Asia with much emphasis on Indonesia.

⁴⁵ This analysis is of course greatly simplified. There are many dedicated Indonesian civil servants living on modest incomes. For an illustration of how Indonesian bureaucrats may employ their monopoly power for extortion, see Olken and Barron (2009). See McLeod (2005) on the slow pace of bureaucratic reform.

popular institution in the country. While it has achieved much, including the imprisonment of cabinet ministers and heads of subnational governments, its work has been hamstrung by limited resources and frequent attempts by senior politicians to undermine its authority.⁴⁶ Third, while introducing at least some public accountability, democracy has also created greater uncertainty in government-business relations. The proposition that 'the only thing worse than organized corruption is disorganized corruption' (Shleifer and Vishny, 1993) is relevant to Indonesia's commercial environment. Under Soeharto, and abstracting from moral considerations, the rules of engagement were generally very clear: who to pay, how much, and for what benefit. The greater political fluidity under democracy has introduced considerable uncertainty with regard to all three parameters. The consequence is that there is much greater uncertainty in business, especially for long-term, capital-intensive projects such as infrastructure and mining.⁴⁷

A third example is the struggle to define a workable division between state and market. That is, what are the public and collective goods that only a government can provide, or establish a satisfactory framework in which they can be provided, and what is best left to the market? Corruption persists partly because Indonesia's legal system is still in its infancy. A substantial proportion of the legal code still originates from the colonial era and is written in Dutch, a language now intelligible to less than 1% of the population. Most firms, especially larger foreign ones, try to avoid the legal system anyway.⁴⁸ The level of criminality and the resort to private security providers suggest that the police force is unable to adequately discharge its responsibilities (Wilson, 2015). The rapid environmental degradation indicates that the 'protection of the commons' is still weak.

Yet in other areas there has been more intervention than could be justified on efficiency or equity grounds. Industry policy is a case in point. Successive administrations in both the authoritarian and democratic eras have attempted to implement selective industry policy (that is, non-neutral inter-industry and inter-firm incentives) through a plethora of instruments: import protection, directed credit, a sizeable state enterprise sector, fiscal incentives, regulatory provisions, preferential bidding arrangements, and much else. As noted above, Indonesia has industrialized rapidly, especially during the Soeharto era. But the overwhelming evidence is that this dynamism has been the result of the general factors that have driven growth in all sectors. In fact, selectivity has either had no impact or possibly a negative one. The sectors and firms that have received government largesse have not achieved higher rates of productivity growth, superior export performance or exceeded any other benchmark indicator (Hill, 1996). In fact, the most detailed study of the political economy determinants of

⁴⁶ See Butt (2011) for an analysis of the work of the KPK.

⁴⁷ See Wells and Ahmed (2007) for an authoritative case study of the complexities of FDI in capital-intensive projects in Indonesia before and after the AFC.

⁴⁸ See Deinla (2017) for a comparative Southeast Asian analysis.

inter-industry protection concluded that ‘Governments may not be very good at picking winners, but losers are good at picking governments.’ (Basri, 2001)⁴⁹

11. Conclusions

Over the past half-century Indonesia has been one of the world’s major development success stories. Facing highly unfavourable initial conditions, and defying notions of path dependence, it started to grow quickly from the late 1960’s, and it has by and large maintained this dynamism, apart from the AFC years and albeit at a slower growth rate in the 21st century. At the three key junctures in its history, 1945, 1966, and 1998, the overwhelmingly gloomy prognostications were proven to be mistaken. Per capita incomes have risen more than six-fold over 50 years, poverty has fallen rapidly, and social indicators have improved significantly. This achievement has broader ramifications, for the 630-million people of Southeast Asia, in which Indonesia is the dominant power, and the Moslem world, where there are relatively few cases of dynamic economies and democratic polities.

Of course, numerous caveats need to be attached to this conclusion. Although it warrants inclusion in the high-growth club, it has not grown as fast as some of its neighbours, notably China and the Asian NIE’s. Since the AFC it appears to have transitioned to a lower equilibrium growth rate, one that is resulting in much slower poverty eradication and job creation. Inequality has risen appreciably this century, compounding the social problems. In addition, the government’s power to tax is insufficient to provide the goods and services the community expects, while most environmental indicators have deteriorated, some perilously so. The country’s institutions are at an embryonic stage of development and remain vulnerable to capture.

The analytical explanations for these outcomes are largely conventional. That is, Indonesia began to grow quickly once it opened up to the world economy, adopted prudent macroeconomic policies, ended conflict, achieved political stability, provided a workable business environment, invested in the supply side (especially education and, earlier, infrastructure), and ensured reasonably broad-based social progress.⁵⁰ The international environment has also been fairly benign for most of the period. The economic takeoff period occurred during the Cold War era, when United States economic and diplomatic support was assured and generous. This also coincided with Japan’s period of exceptionally rapid growth, combined with strong economic complementarities

⁴⁹ According to this research, industries in which Soeharto cronies were prominent were the most reliable predictor of above-average import protection. There has been no comparable study for the democratic era, but if anything industry policy has become more popular politically, and populist (Patunru and Rahardja, 2015). Rock (2017) is the major academic dissenter to these conclusions.

⁵⁰ That is, the variables that are consistent with Sala-i-Martin’s (1997) ‘two million regressions’. See Temple (2003) and Hill and Hill (2006) for attempts to apply the growth econometrics literature to Indonesia.

and close diplomatic relations between the two countries. From the 1970s onwards, Indonesia was surrounded by high-growth and mostly stable neighbours. In the 21st century the China boom led to huge windfall gains for Indonesia through the effects on its terms of trade. To be sure, volatility in international capital and commodity markets has posed significant challenges for Indonesian policy makers but, with the exception of the AFC, they have learnt to manage these external shocks effectively.

Indonesia's political economy has underpinned and reinforced its economic dynamism. Soeharto's controversial accession to power in 1966 created the imperative for economic growth as his principal source of political legitimacy. The revolution of rising expectations created during his three-decade rule was a factor in the country's surprising swift navigation through its twin crises of 1997-98. In the four elections since Soeharto's demise the commitment to continued economic growth has been adopted by all presidential candidates. The bipartisan commitment to macroeconomic prudence appears secure, and it should be adequate to prevent a recurrence of economic crises. Meanwhile, in this, one of the world's most ethnically and geographically diverse nation states, democratic space and local-level autonomy are able to peacefully mediate most of the country's social and political tensions.

Finally, although it is a single country observation, the Indonesian experience is also of relevance in exploring the interrelationships between democracy and economic development. At the most general level, the literature suggests that democracy is 'good' for development (Acemoglu et al, 2014), although there are plenty of counter-examples, most especially from East Asia, and dissenters in the literature. Indonesia's experience indicates that growth has been lower, inequality higher and corruption largely unchanged during the democratic era. Of course, democratic freedoms are inherently important, and these inferences are far too casual for rigorous empirical verification. There are also much bigger issues than these, none more so than the survival of the Indonesian nation state.

Can any causal inferences be drawn between the transition to democracy and economic policy-making, and hence economic outcomes? A number have been suggested in this paper. First, macroeconomic rules have been instituted in both periods which, while different, have had a similar effect in 'insulating' macro policy from political pressures. But in other respects there are significant differences. For one thing, policy reform is slower, owing to the larger number of 'veto players' in the policy making processes. But reforms once enacted are more likely to be secure since they have greater democratic legitimacy.

Second, policy time horizons are shorter, as determined by political cycles. The most obvious example is public sector infrastructure expenditure, which as a percentage of GDP is now about half that of the Soeharto era, even allowing for the time required to restore fiscal health in the wake of the AFC (McCawley, 2015). Governments appear to be reluctant to commit resources to projects that will benefit future administrations, while under decentralization inter-jurisdictional coordination has become more complicated.

Third, perhaps the most puzzling difference is the sharp increase in inequality under democracy, when the majority of the population, who are still poor or near-poor, now have a voice, and rudimentary SSN's have been instituted. As surveyed above, this outcome does not appear to have been the result of a deliberate strategy on the part of leaders in the democratic era. Rather it has been an accidental outcome of the interaction between the labour market, the education system, and commodity booms, an outcome that policy makers thus far have been unable to correct through compensating fiscal and other measures.

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Table 1: Comparative Socio-economic Conditions c1960

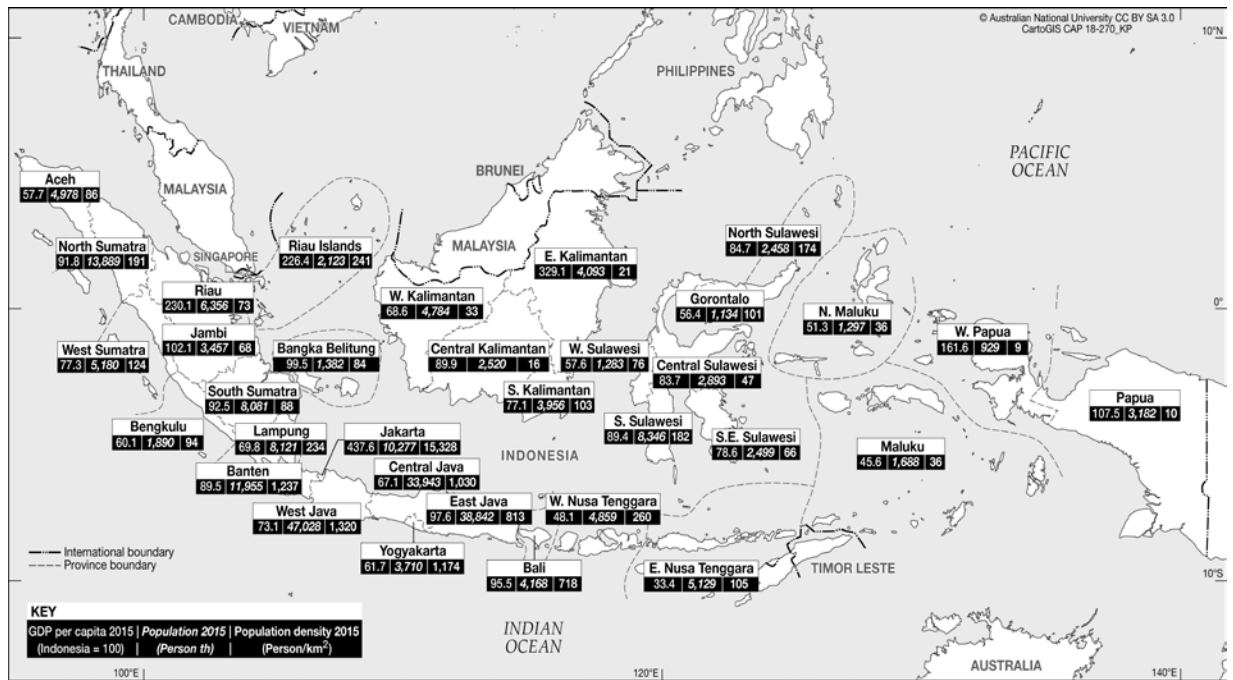
Country	GDP per capita (constant 2010 \$)	Trade (% of GDP)	Years of schooling, for aged 15 and above	Years of schooling, for aged 25 and above	Life expectancy at birth (years)	Infant mortality (deaths per 1,000 lives)
Indonesia	577	11.6	1.6	1.1	47.0	166.7
Malaysia	1,408	85.7	2.8	2.3	57.9	81.1
Philippines	1,059	38.3	3.5	3.0	57.1	86.5
Thailand	571	34.9	2.6	2.1	53.3	108.9

Table 2: Comparative Socio-economic Conditions 2015

Country	GDP per capita (constant 2010 \$)	Trade (% of GDP)	Years of schooling, for aged 15 and above	Years of schooling, for aged 25 and above	Life expectancy at birth (years)	Infant mortality (deaths per 1,000 lives)
Indonesia	3,834	41.9	7.6	7.3	68.6	25.0
Malaysia	10,878	134.2	10.4	9.8	74.5	6.8
Philippines	2,640	63.0	8.4	8.2	68.0	23.2
Thailand	5,775	126.8	8.0	7.3	74.1	11.2

Table 3: Comparative Institutional and Governance Indicators

Indicator	China	India	Indonesia	Philippines	Thailand
CPI (rank / # of countries)					
1995	40/41	35/41	41/41	36/41	34/41
2016	79/176	79/176	90/176	101/176	101/176
LPI (rank / # of countries)					
2007	30/150	39/150	43/150	65/150	31/150
2016	27/160	35/160	63/160	71/160	45/160
EODB (rank / # of countries)					
2004	72/140	133/140	131/140	109/140	30/140
2018	78/190	100/190	72/190	113/190	26/190
WGI - GE (rank / # of countries)					
1996	105/184	85/184	141/184	102/184	73/184
2016	68/209	90/209	98/209	101/209	71/209
WGI - V&A (rank / # of countries)					
1996	177/201	73/201	160/201	84/201	80/201
2016	190/204	85/204	102/204	101/204	162/204



Map: The Sub-National Socio-Economic Mosaic

Figure 1: Annual GDP Growth and GDP Per Capita, 1960-2016

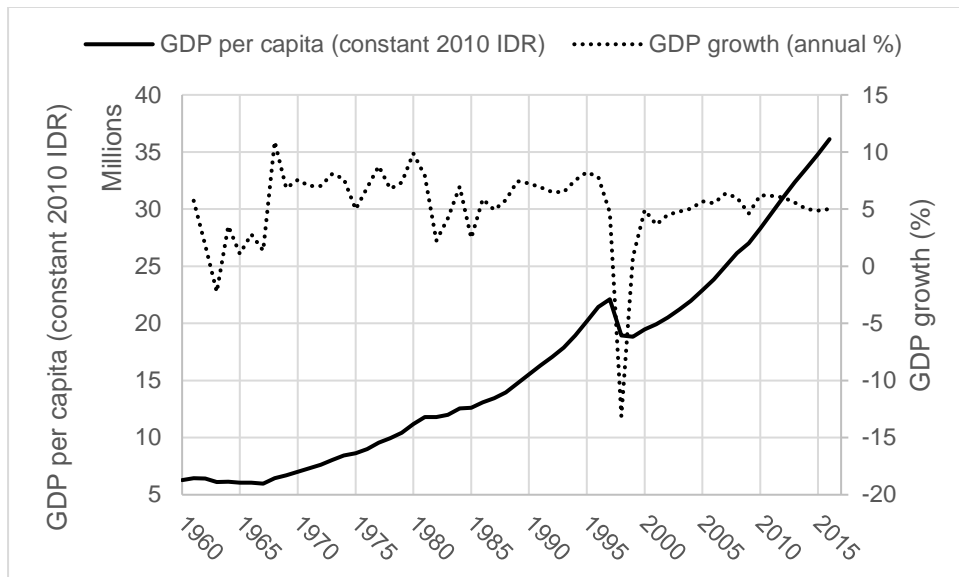


Figure 2: Per Capita Income, Indonesia and Comparators, 1960-2016

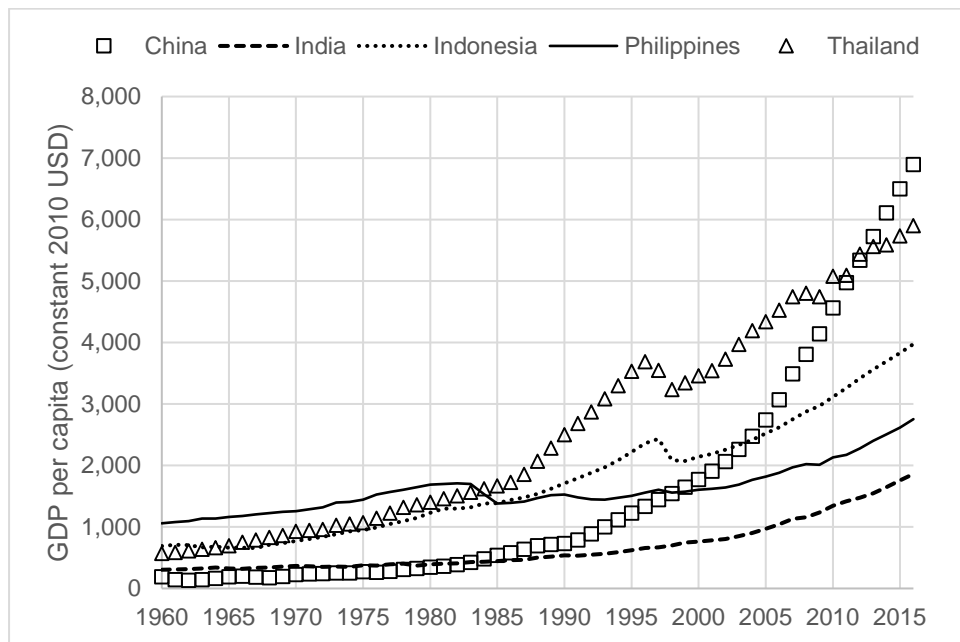


Figure 3: Growth of the Main Sectors, 1960-2016, A, M, S

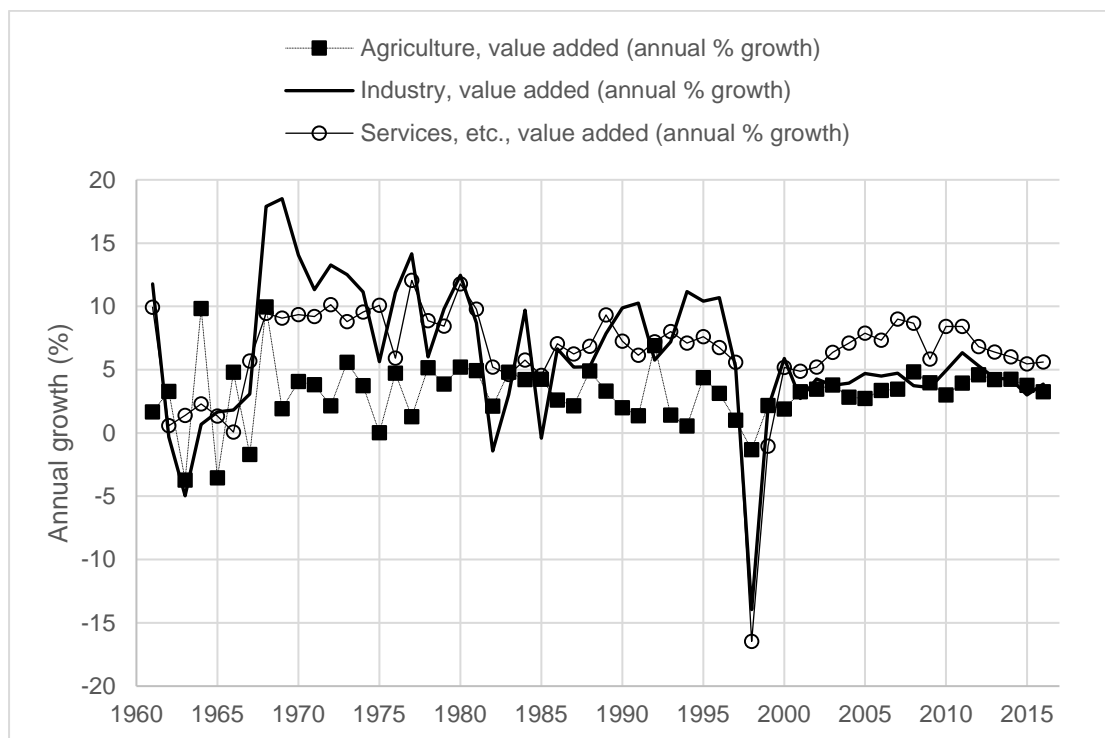


Figure 4: Structural Change, 1960-2016

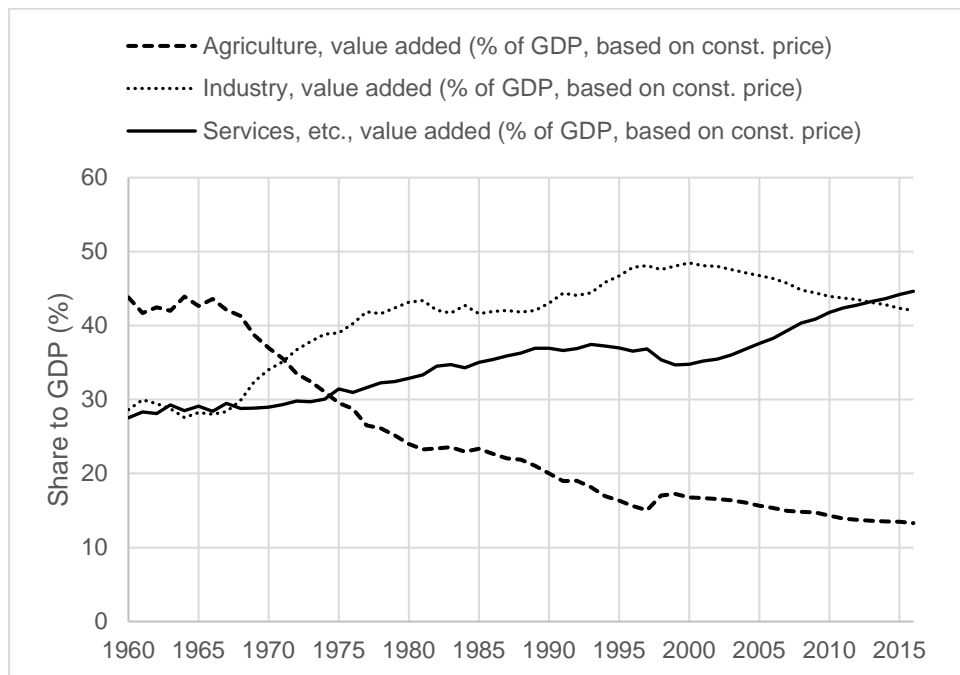


Figure 5: Investment and Savings, 1960-2016 (I, S, I-S/GDP)

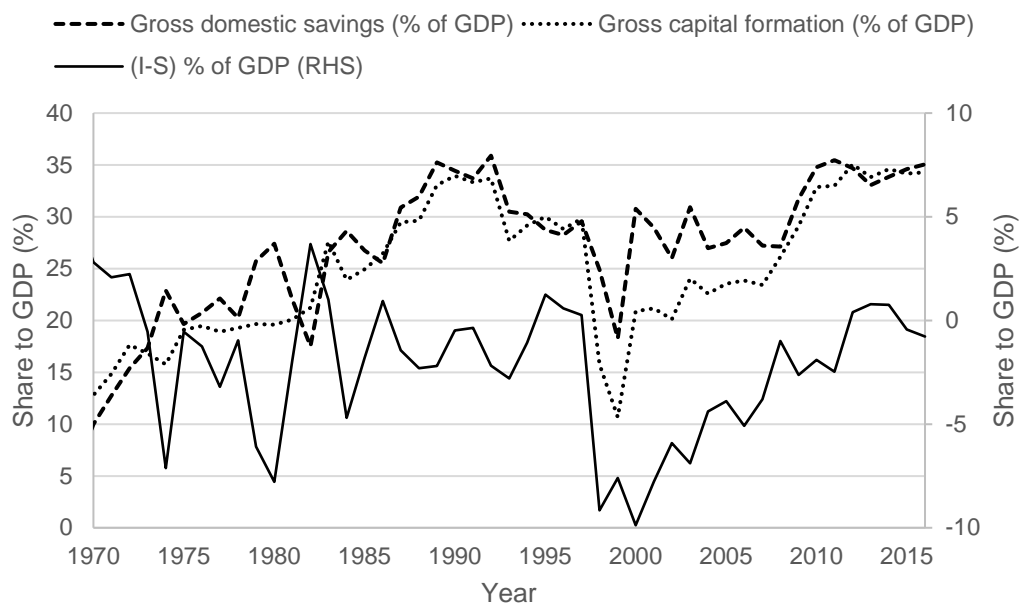


Figure 6A: International Trade Shares, Indonesia and Comparators, 1960-2016

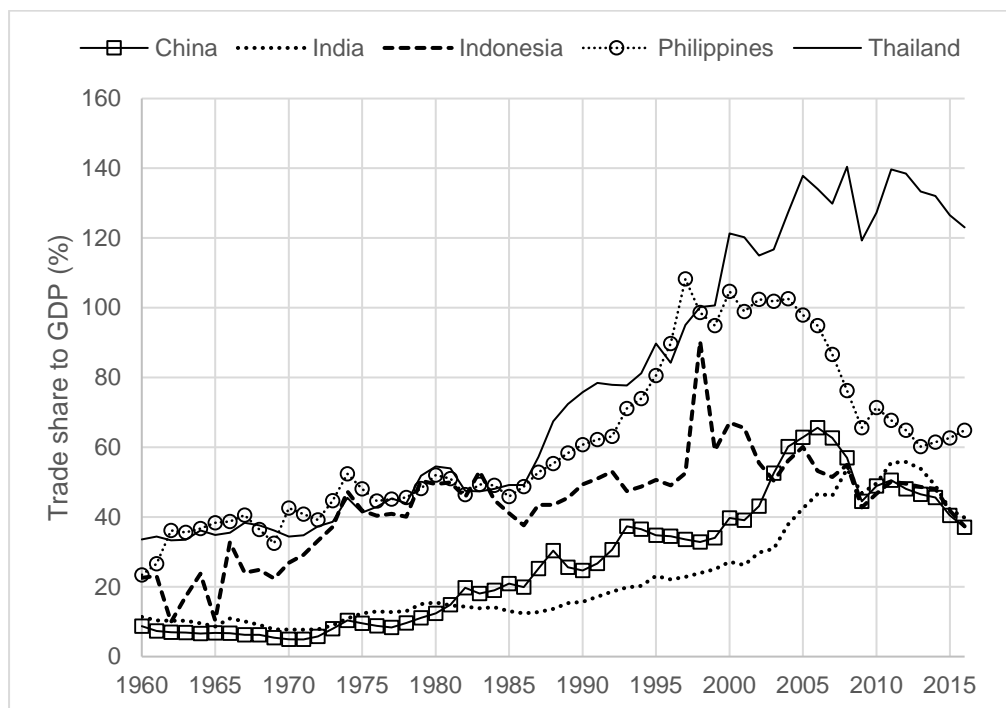


Figure 6b: FDI Shares, Indonesia and Comparators, 1960-2016

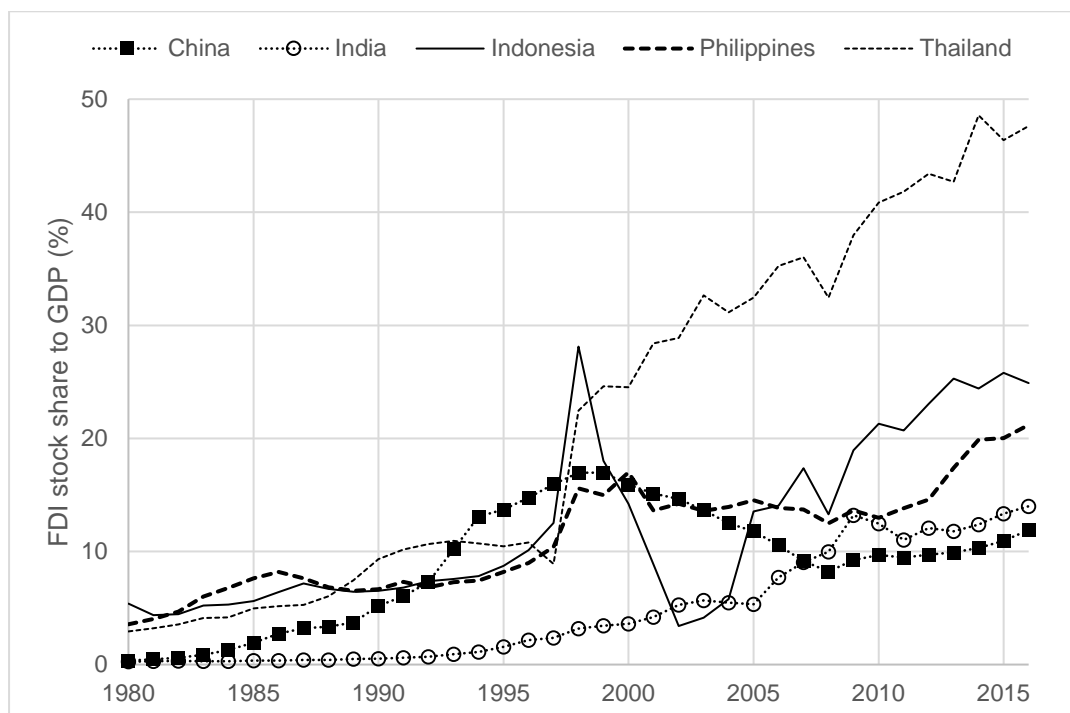


Figure 6C: Indonesian Export Composition, 1970-2016

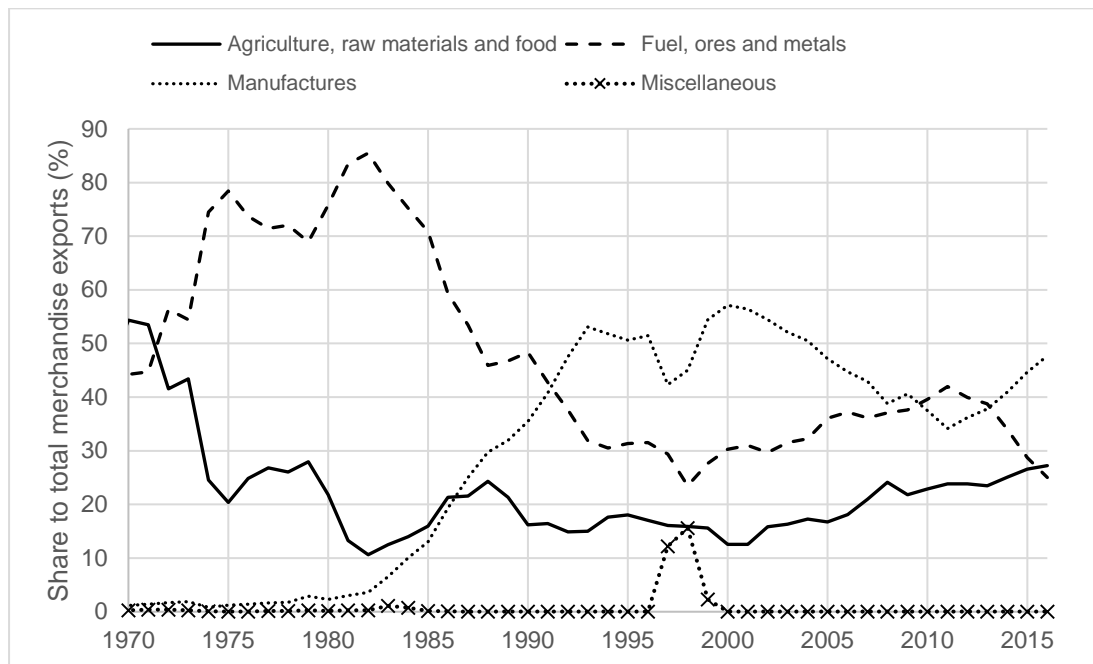


Figure 7: The Terms of Trade and the Real Exchange Rate

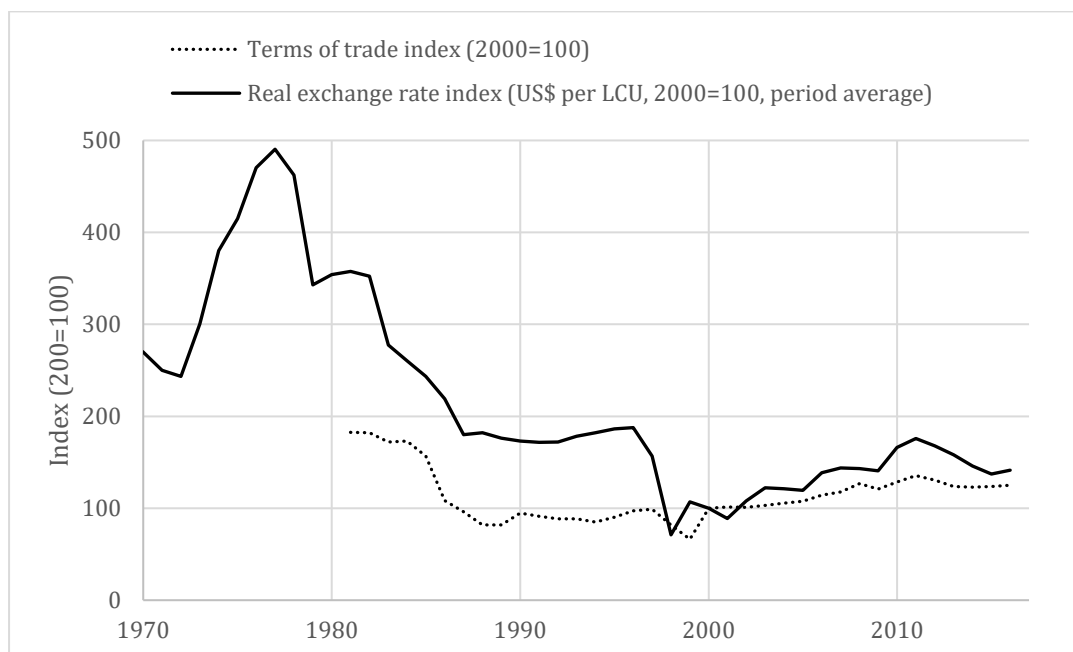


Figure 8: Inflation and Exchange Rate, 1960-2016

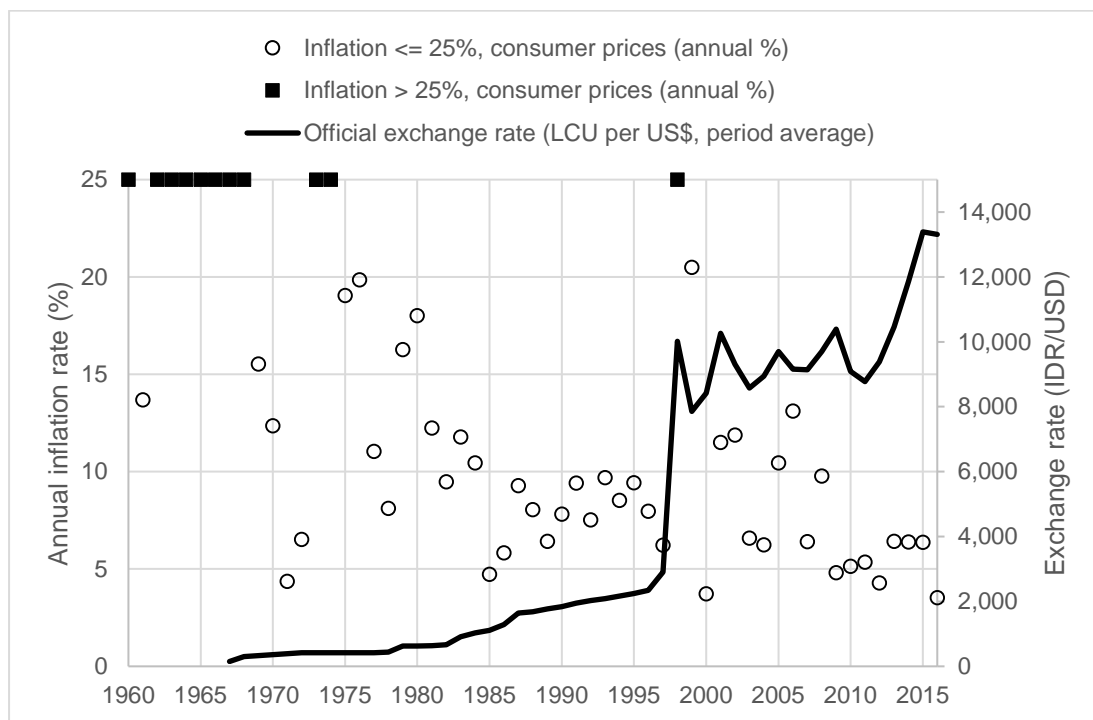


Figure 9: The Budget, 1960-2016

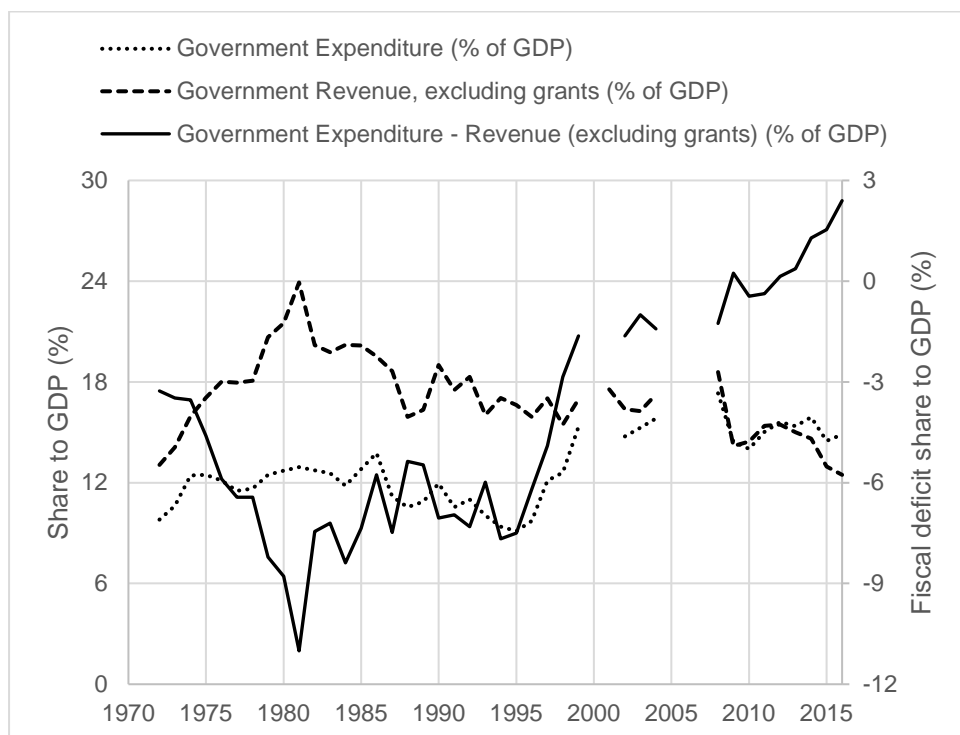


Figure 10: Poverty and Inequality, 1976-2017

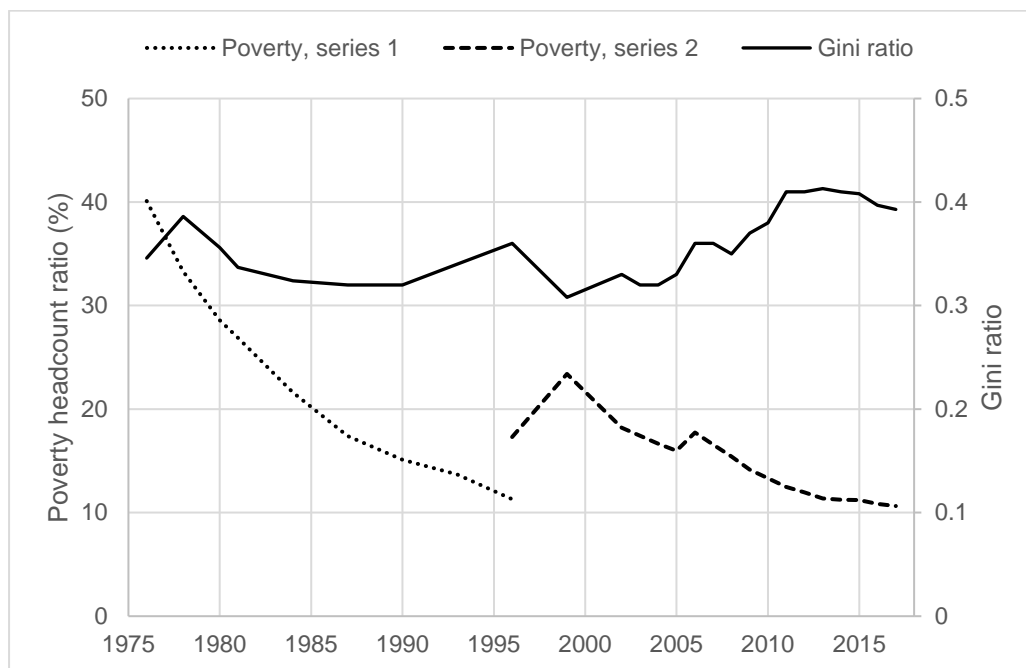


Figure 11: Deforestation and Emissions Indicators

