CHAPTER 2

THEORETICAL BACKGROUND

This chapter provides a literature review of theories that are related to the main thesis. As the main framework used here, the first sub section is to deliver growth diagnostics approach. Since there is no specific literature used in growth diagnostics framework, Ramsey-Koopmans growth model gives an explanatory theory that is useful to understand diagnosing process of an economy. Theory about institution, which is divided into economic and political institutions, is the last theory explained in this chapter.

2.1 Growth Diagnostics Approach

Growth diagnostics is a 'new' kind of growth strategy stemming from a major dissatisfaction from a strategy composed of a list of reforms called Washington Consensus, which is mainly concerned with stabilization, liberalization, and privatization. It was very popular in 1980s, especially countries in Latin America which strongly believed in such strategy. But several radical reforms in Latin America, Asia, and, to some degree, Africa, which promised fruitful results did not happen, when the theory does not say so. By contrast, Rodrik (2004) shows that the most successful growth performers have implemented rather heterodox policies, instead. He gives examples of China, India, and Vietnam.

China favors market-oriented economy but it does not follow the general recipes. It adjusted the recipes to its local situation. Its government realized that its country was still notorious for chronic piracies and it is very hard to dismantle it. Hence, China reformed its incentives system in two opposite ways. China partially

replaced its plan system with market system, underplayed property rights, and opened up to the world in a partial way. For the last two decades China has led global economic growth by its 9 % growth average in per capita terms, which is a very stunning performance. Apparently, Vietnam implemented similar policies the Chinese government has done. Vietnam obeyed the same principles since the second half of 1980s. And India, another Asian economy giant, walked through the same vein. India took off a decade earlier than what common prediction suggests, that is 1980s rather than early 1990s. It combined heavy protectionism and liberalization.

At first, these experiences might seem very odd and unbelievable, but eventually it is not at odds, anyway, at least to HRV. They suggest coming up with an identical growth strategy for all countries, that is Washington Consensus and its augmented version, regardless of their situations, is bound to fail. This simple logic leads to the birth of growth diagnostics that is defined as a strategy for figuring out the policy priorities.

This approach works as that in medical science. Just as medical science helps doctors in scanning disorders, identifying the main one, attacking it by prescribing right recipes, and helping a patient. Economists use the same mechanism in growth diagnostics framework to "heal" a particular country. Using this strategy, economists are able to identify the most binding constraints on economic activity, and hence set the appropriate policies to produce the best result.

2.1.1 The Framework

The approach used in this study is grounded on the standard theories of second-best and partial reform (HRV 2005, page 3). An under-performing economy is indicated by market imperfections and distortions dominating it. Distortions prevent an economy from deploying its resources resulting in low productivity. Such distortions would create a wedge between private and social perceptions of specific economic activities.

This framework gives details to the policymakers doing their best to develop social welfare subject to standard resource constraint and pre-existing distortions or wedges in the economy. This policy-making problem takes the general form in equation (2.1.1)

$$\mu_i^s(\tau,...) - \mu_i^p(\tau,...) - \tau_i = 0, \qquad (2.1.1)$$

where wedges are denoted by $\tau = {\tau 1, \tau 2, ..., \tau k}$ with τ_1 representing the distortion in activity *i*, whereas $\mu_i^s(\tau,...)$ and $\mu_i^p(\tau,...)$ represent marginal valuations of activity *i* by society and private agents, respectively. This formula is the simplest form of situation faced by policymakers in every economy because in reality there remain so many variables on which an economy depends. This formula states that general equilibrium of private and social functions hinge on all wedges in the system. This means that one distortion can affect one another. This is called the second-best problem.

In searching how distortions can affect welfare of certain societies, HRV forms further formula

$$\frac{du}{d\tau_j} = -\lambda_j + \sum_i \lambda_i \frac{\partial [\mu_i^s(\tau, ...) - \mu_i^p(\tau, ...)]}{\partial \tau_j}$$

$$\lambda_i \ge 0, i = \{1, 2, ..., k\}$$
(2.1.2)

If *u* is welfare of the average members of society, then by using this formula we can figure out how much gain in welfare from reducing one of the distortions marginally. Note that two equations above are the Lagrange multipliers corresponding to the constraints associated with each of the distortions and also assume that the initial value of τ_j is strictly positive. We can interpret these equations like this. Since we can think of τ_j as a tax reducing equilibrium of activity in that market, we can capture direct effect of a small change in τ_j by measuring the magnitude of λ_j . We can say λ_j as marginal welfare benefit from reducing the distortion in market *j*. The bigger the distortion, the higher the magnitude of λ_j . When there is a sole distortion in an economy, the second term

on the right-hand side of equation (2.1.2) vanishes, since $\lambda_i = 0$ for all $j \neq i$. This means that in this case only direct effect matters. But when other distortions exist, we need to track interaction effects across distorted margins. If this happens and on balance the effect is to reduce gaps, *ceteris paribus*, changing τ_j produces an additional welfare benefit. On the other hand, if this effect is to increase gaps, the welfare gain is reduced. Changing effect of τ_j typically indicates second-best complication².

2.1.2 The Biggest Magnitude

Many economists might be tempted to suggest eliminating all distortions and obstacles through various ways in order to perform successful reform policies. They could suggest a wholesale reform assuming that by tackling wedges and eliminated them simultaneously will generate multipliers effects associated with it. When a wholesale reform might look rather tedious to do, they might propose second strategy that is reforming as much reform as a nation can, assuming that this task is more practicable and doable than the former one. But sometimes they forget that it takes not only complete knowledge of all prevailing distortions, it also requires capacity to remove them completely. The third strategy that might come up into their minds is second-best reform. This entices a fair judgment. It is more feasible to do in terms of collecting data and knowledge necessitated, but there is a severe shortcoming. Most of second-best interactions are really difficult to figure out and quantify *ex ante*. Most of them tend to be revealed *ex post*.

The last possible strategy is targeting the biggest distortions in the economy by concertina method- order distortions from largest to smallest in proportional terms, start from the largest one up to the smallest one, until there are only minuscule distortions left. However, as three reform strategies explained above, this strategy also has its severe shortcomings. They include complete knowledge collection and no guarantee on welfare improvement. It may turn out

² For complete examples of typical second-best cases, see HRV (2005) page 4-5.

that the largest distortion is on some sector or activity is not the biggest problem of the economy. In sum, this strategy is nothing but of uncertain benefits.

Stemming from these rather somewhat impractical and no guarantee to apply on countries doing reform policies, HRV suggest focusing on the most binding constraints. This approach views distortions generating the biggest magnitude of direct effects should be on the top list of designing reform priorities. The basic argument here is very simple. This idea covers loopholes of other strategies that are impractical and daunting. This strategy tells us to guess which sectors or activities that could generate the largest magnitude of positive effects when to be reformed. In making better use of this strategy, HRV suggest us paying more attention to proximate determinants of growth than on specific distortions for convenience's sake.

2.1.3 Investment as the Main Horsepower

Since growth diagnostics approach is an applied tool, HRV guide readers to move in two stages in practice:

- 1. Uncovering the greatest impediments to higher growth
- 2. Uncovering the specific distortions behind the most severe of these constraints.

Using standard endogenous growth model it predicts that consumption and capital growth according to

$$\frac{d_{\mathbf{r}}}{\sigma_{\mathbf{r}}} = \frac{k_{\mathbf{r}}}{k_{\mathbf{r}}} = \sigma[r(1-\tau) - \rho]$$
(2.1.3)

Where a dot over variable denotes the rate of change over time, c denotes consumption, k denotes capital, r denotes the rate of return on capital, τ denotes the tax rate on capital, actual or expected, formal or informal, ρ denotes the world rate of interest, and σ denotes elasticity of intertemporal elasticity in consumption

In addition, the private return on capital *r* is given by

$$r = r(a, \theta, x) \tag{2.1.4}$$

where *a* is indicator of total factor productivity, *x* is availability of complementary factors of production, such as infrastructure or human capital, and θ is index of externality (a higher θ means a larger distortion)

From equations (2.1.3) and (2.1.4) we can see what growth diagnostics approach is all about. So, when applied to real world, policymakers need to carefully examine which one of these two factors that may provide the largest direct effect. The approach gives the greatest weight on capital and investment as the determinants of growth and welfare, as indicated by the top branches of growth diagnostics tree, that are high cost of finance and low return to economic activity.

To be able to properly use the framework, one needs to move from top to bottom, not vice versa or from right to left and vice versa because this tree is not a root cause analysis diagram. Hausmann, Klinger, and Wagner (2008) give five suggestions to set up an appropriate growth diagnostic exercise as follows. First step requires a researcher to describe the growth process and determine a relevant question. This stage suggests several dimensions deserve consideration, such as univariate analysis of country's growth, benchmarking against neighboring subnational units (i.e., comparing Indonesia with ASEAN countries), and looking at correlates of country's growth. Next, he should go through a differential diagnosis. It is wise to say that when one goes down the decision tree, he ought to read the tree from top to bottom, and not side to side or from the bottom up (see figure 2.1). By going through this stage, he must have answered the question of whether is it supply problem or demand problem in investment level of the economy. In addition, we can also give a proper analysis of savings rate in the economy.

The third step is positing a syndrome. Compiling symptoms we have gathered, we must have ample empirical evidence to be sure what disorders occur in the economy. Hausmann, Klinger, and Wagner list several syndromes that usually take place in countries, such as the over-borrowing state, the over-taxing state, the under-investing state, the under-protecting state, disruptions to the export sector, and barriers to entry. Before making through the last step, one needs to test further implications, corroborate evidence of the syndrome and iterate on step two and three until converge.



Source: Hausmann, Rodrik, and Velasco (2005)

2.2 Ramsey-Cass-Koopmans Growth Model

This growth model was originally initiated by Frank P. Ramsey (1928) Basically, at first Ramsey's work was to tackle saving and its multiplier problem. The main question to be answered in Ramsey's original paper was the proportion of saving that a nation should allocate given its national income (Ramsey 1928: 543). His work explains an important mechanism of consumer's saving behavior in relation to optimal interaction between household and firms and competitive markets (Barro and Sala-i-Martin, 2004). Later on, this model was refined by Cass (1965) and Koopmans (1965). This model will be used to explain growth diagnostics in terms of interests in investment. It will be explained in two parts. The first one would be of household and the second one would be of firms.

2.2.1 Households

In this model, households are assumed to have perfect foresight and can maximize their individual utility by providing elements of production function that are optimal labor and capital to rent to firms. Furthermore, to simplify they are assumed to use up their income just for two economic activities, saving and consumption. Their individual utility is given by.

$$U = \int_{0}^{\infty} u[(c)] e^{-(\rho - n)t} dt$$
(2.2.1)

Equation (2.2.1) explains that at time 0, the household's utility is a weighted sum of all future flows of utility u(c) here tells that household's utility has positive relationship with quantity of their consumption per person, c. It is assumed that c is concave and u' > 0, u'' < 0. This assumes a desire to smooth consumption over time which means that in some periods a household would consume in a very small amount, while at another period they would consume a in a very big amount. This behavior induces saving behavior. Households will tend to borrow when income is relatively low and save when income is relatively high. Barro and Sala-i-Martin assume that u(c) satisfies Inada conditions. $u(c)' \rightarrow \infty$ as $c \rightarrow 0$ and $u(c)' \rightarrow 0$ as $c \rightarrow 0$.

Another important part of this equation that needs further explanation is the utility enjoyed by households given time preference of their doing consumptions. e^{mt} can be said as a function of size of family, *L*. Inclusion of this multiplier in equation means that addition of utilities of all members alive at time *t* affects utility of a household as a whole, whereas the other multiplier, $e^{-\rho t}$ refers to the rate of time preference, ρ . This time preference is always greater than 0. The bigger the value of ρ , the less the value utilities received later. Moreover, it is assumed that $\rho > n$ which implies that U in equation is bounded if c is constant over time (Barro and and Sala-i-Martin, 2004). This explains the assumption of perfect foresight of households in that they are governed by the same motives as regards accumulation, so that there is no chance of their savings being selfishly consumed by next generations and that there is almost zero possibility that accumulations are to be swept away (Ramsey, 1928: 544).

Intuitively, we would want to ask where households get their money, or in other words, their budget constraints. As explained above, it is assumed that this model accentuates interaction between households and firms in a competitive market. So, it is easy to tell that households earn their money from rents and wage paid by firms for their services. This can be summed up in one equation.

$$\frac{d(assets)}{dt} = r.(assets) + wL - C \tag{2.2.2}$$

Equation (2.2.2) tells us that household's income is to be accumulated in assets when it is not used for consumption. In per capita terms, it can be arranged like this.

$$\dot{a} = w + ra - c - na \tag{2.2.3}$$

This entails a chronic problem if each household assumed to be able to borrow an unlimited amount at the going interest rate, r(t). The problem lies here is the possibility of occurrences of Ponzi game³ because households can borrow to finance current consumption and then when it comes to date, they can borrow another amount of loan to roll over the principal and pay all the interest. This will recur. It means that a household can make their consumption for free at arbitrarily high level.

The next question regards the solution for this kind of problem. The answer can be that of present-value Hamiltonian.

$$J = u[c(t)].e^{-(\rho-n)t} + v(t).\{w(t) + [r(t) - n].a(t) - c(t)]$$
(2.2.4)

This formulation has one new multiplier that does not exist in other formulations before, v(t). This multiplier is the present-value shadow price of income. This refers to the value of an increment of income at time t in units of utilities at time 0.

³ For more detailed descriptive explanation see Minsky (2008)

After further first-order derivations⁴, we can get an equation explaining basic condition for choosing consumption over time.

$$r = \rho - \left(\frac{du/dt}{u'}\right) = \rho - \left[\frac{u''(c).c}{u'(c)}\right].(\dot{c}/c)$$
(2.2.5)

This equation is known as the Euler equation. This states that, as explained above about borrowing options, households choose consumption so as to see if rate of return, *r*, is equal to the rate of time preference, ρ , plus the rate of decrease of the marginal utility of consumption, *u'*, due to growing per capita consumption, *c*. We can interpret this as what consumers put value on today's and tomorrow's consumption. We can say that consumers value today's consumption as lower than tomorrow's consumption if $\dot{c}/c > 0$. More elaborative cause of additional tomorrow's or today's consumption can be that of interest rate. It will not be explained here. In brief, higher interest rates increase the possibility of households shifting their present consumption to the future consumption and have an income effect that tends to raise consumption at all dates.

2.2.2 Firms

The firms' production function is $Y = F[K, \hat{L}]$

(2.3.1)

This production function tells that firm only uses capital and labor in production process. \hat{L} here denotes effective labor which is the combination of raw labor and the level of technology. In this model, we can think of firm as renting services of capital from the households. If R is the rental rate of a unit of capital, a firm's total cost for capital is *RK*. In the case of expanding machinery's capability, for instance, we can increase or decrease its capability without incurring any additional expenses.

The firms' profit maximization behavior at any point of time. It is given by $\pi = F(K, \hat{L}) - (r + \delta).K - wL$ (2.3.2)

⁴ Barro and Sala-i-Martin (2004) provides detailed derivations in appendix.

We can see from this equation that stock of capital depreciates at a constant rate, $\delta \ge 0$; the net rate of return to a household that owns a unit of capital is $R - \delta$. And it is also assumed that capital and loans are perfect substitutes as store of value, then we must have $r = R - \delta$.

2.2.3 Equilibrium

We now have seen how consumers' saving behavior and firms' profit maximization behavior are affected by optimal interaction in competitive market. This growth model can contribute to an understanding of the thesis through Euler equation given by

$$\frac{\dot{k}_{t}}{k_{t}} = \frac{\dot{c}_{t}}{c_{t}} = \sigma(c_{t})(r_{t}(a_{t},\theta_{t},x_{t})(1-\tau_{t})-\rho)$$
(2.4.1)

where θ is index of externality, x is availability of complementary factors of productions, such as infrastructure or human capital, σ is the inverse of the negative of the elasticity of marginal utility, and ρ here is the real interest rate. This is the starting point of doing analysis of binding constraints to growth as it can explain many important factors affecting growth of an economy in the short run, as well as those that matter for sustained growth in the future [Gooptu and Ianchovichina (2007)].

The key multiplier variable here are ρ and r. If ρ is high, for any return on investment, investment is low and the economy is considered liquidity constraint. When ρ in a country is high, we can say that the country has limited access to external capital market or there are problems in domestic financial market. This can be due to variety of problems, such as low domestic saving and/or poor domestic financial intermediation. On the other hand, if r is low, for any cost of capital, investment is low and the economy is considered inefficient. When r in a country is low, we can say that there is insufficiency in complementary factors of production in that country. This insufficiency can take forms in infrastructure and human capital, poor protection on property rights, rampant corruption, etc. These two variables can give either positive or negative movement in consumption level, \dot{c}_t / \dot{c}_t and, thus, lead to movement in capital accumulation, \dot{k}_t / k_t .

2.3 Institutions and Growth

Within long history of economic growth in many countries, institutions have played a very important protagonist role explaining a distinct difference of countries economic performance (North and Thomas, 1973). While theoretical foundations of physical capital accumulation (Solow, 1956) and technological progress (Romer, 1990) have been vindicated as important explanatory variables in a nation's economic growth empirically, specific related policies, of course, cannot function properly when good institutions do not exist. A vast amount of research on this subject vindicate its function as a part to sustain longer-term growth (see Acemoglou, Johnson and, Robinson 2001; Rodrik, Subramanian, and Trebbi 2004; Easterly and Levine 2003).

However, institutions seem to be a scarce resource in developing countries which may have hindered their progress. According to North (1990), institutions are the prevailing rules of the game in society. This definition suggests forming an incentive-responded mechanism in a society in order to achieve a more rational society. But Greif (1993) seems not to fully agree with North⁵.

2.3.1 Economic Institutions

2.3.1.1 Property Rights

For an inventor, scientist, artists, writers, and those who need incentive to advance, property right is really a big deal because property right is something that recognizes one's ability and creativity. It is something very unique.

⁵ According to Greif, the definition of institution should be brought into a wider area that is including organizations as an element of institution itself.

Moreover, incentive for further advancement is the biggest deal that includes all such things explained above. When property right is violated, an inventor does not have the incentives to investment in physical capital or human capital.

This is why western countries could enjoy their onset in modern economic growth as pointed out by North and Thomas (1973) and North and Weingast (1989). In the present days just as nearly the same in the old days, property rights are protected constantly in developed nations, thus we can see most of inventions and innovations find their home there. The exact opposite occurs in developing and less developed nations.

In addition, Banerjee (2005) views lack of enforcement in property rights as entailing risk of being expropriated. Therefore, investors might not capture full marginal return of its investment which leads to low investments. Banerjee adds up the problems of the credit market, which potentially creates a bigger problem in one economy, due to difficulties in providing proper collaterals.

All these suggest that property rights should be included in legislation authority agenda. However, property right is a two-side coin, so that in one side it should be protected very strictly, whereas on the other hand, it should not. This raises controversy, indeed. The bright side of it is that it can be a very good trigger in terms of giving more incentives for more inventions. This includes secondary and tertiary products, such as high-technology products. The dark side, on the other hand, suggests very strict and expensive patent rights are not a good idea when it comes to basic and primary products, for instance, medicines. It is suggested by Knack and Keefer (1995) and Acemoglu, Johnson, and Robinson (2001) whose findings are robust in explaining higher average incomes with more secure property rights.

2.3.1.2 Regulatory Institutions

Most economists believe that market economic system is the best choice for every nation. This is actually partly proven by the fall of Soviet Union in early 1990s and rise of Chinese economy since 1978 embracing market economic system. However, this seemingly perfect system is not that flawless. Markets often fail when there exist anticompetitive participants, scattered externalities, hazardous asymmetric information between buyers and sellers resulting in moral hazard and adverse selection. Economists even those who fight for free market assiduously realize these shortcomings, and, therefore, try to prop up this system by devising theories of second-best institutions, mechanism design, etc. These kinds of regulatory institutions still have many loopholes, though (Rodrik, 2007).

However, almost many successful countries in terms of high economic growth have strict and clear regulations. It is not enough. It must embrace equality of opportunities in practice. In developing countries, using country's income per capita as the benchmark, this is sometimes abused by bureaucrats in charge to ask for briberies, as implicitly suggested by Van Rijckegham and Weder (2001) who find that higher wages would deter corruption. But Svenson (2005) warns that studies using cross-country data have some problems indicated by different finding resulted from a study conducted by Rauch and Evans (2000) who do not find robust evidence that higher wages deter corruption. Svenson explains that measuring the extent of corruption using rankings is very difficult in terms of telling whether higher wages mitigate corruption or vice versa. Moreover, these data cannot tell if data on wages may refer to the same groups of individuals or not. Corruption itself, according to transparency international is the abuse of entrusted power for private gain⁶.

Another importance of healthy regulatory institutions is that we can prevent a forbidden relationship between certain conglomerates and the government. Examples of forbidden relationships occurred in South Korea and Indonesia. South Korea experienced such forbidden relationship intensively in 1990s, where the government has taken too far by creating and sustaining a comfortable relationship with *chaebol*. The same experience happened in Indonesia commencing from late 1960s up to late 1990s, marking the indomitable power of the late President Soeharto who ruled for 32 years, starting from 1966 to

⁶ http://ww1.transparency.org/about_ti/mission.html

1998. Connection between conglomerates and Soeharto as the president at the time being was so close. For instance, Fisman and Miguel (2008) find that there was a close correlation between information of Soeharto's health condition and movement in Jakarta stock exchange.

2.3.1.3 Causal Relationship between Political and Economic Institutions

The history of the world suggests political institution, which include a form of government (democracy, authoritarian, monarchy, etc.) that somehow is able to impede or boost economic growth of a nation. This kind of hypothesis is echoed by a study conducted by Acemoglu, Johnson, and Robinson (2004) which finds that there is a strong relationship between economic and political institutions. They conclude that economic institutions encouraging economic growth emerge when political institutions that exist in a nation can provide decent access to groups that have serious willingness to enforce security by strong protection of property rights, limit effective constraints on incumbents. However, it is not enough. There must be relatively few rents to be exploited by powerholders.

The problem now is we do not really know what effects political institutions exert on economic institutions. According to Acemoglu, Johnson, and Robinson (2004) there are direct and indirect effects. Direct effect involves concentration of huge political power on a few hands that can significantly affect distribution of resources and opportunity. Chronic problem will emerge when political institutions place all political power in hands of a single individual or a small group and, therefore, this group plays the key role in sustaining protection of property rights and equal opportunity for the rest of population. Indirect effect highlights the channels above. Political institutions affect quality of economic institutions through distribution of *de jure* political power by which political institutions determine.

2.3.2 Political Institutions

2.3.2.1 Democracy

Another part of theory about institution is political institution or metainstitution. According to Rodrik (2007), *metainstitutions* are institutions that elicit and aggregate local knowledge and thereby help build better institutions. Rodrik tells that we cannot rule out the importance of democracy that way by looking at the successful cases of China and South Korea, which are rather authoritarian since cross-national evidence does not say so. Rodrik here accentuates the importance of compiling local knowledge as one salient factor in helping build better institutions.

As Rodrik says that democracy is one of the most important factors that can bring more wealth to a nation, he gives further detail explanation of favorable benefits of democracy, divided to four assertions. He compels that democracies yield long-run growth rates that are more predictable; democracies produce greater short-term stability; democracies handle adverse shocks much better; and democracies deliver better distributional outcomes.

1. Democracy is a Safer Choice in the Long Run

There has been explosive research looking for robust relationship between democracy and long-run growth performance. Barro (1997) finds that in minimum levels of political participatory, democracy possesses positive and significant relationship with long-run growth rates, while he also finds that in higher levels democracy exerts negative relationship, instead. Another study conducted by Alesina, et al. (1996), however, find ambiguous outcome of impact of overall democracy on growth performance. They find no significant difference between that of democratic or authoritarian countries.

But Rodrik is rather optimistic. Using the Freedom House Index of political rights and civil liberties as the proxy to democracy, he finds not very robust result of his regression, which has been suggested before by existing literature that there is no strong, determinate relationship between political participation and average long-run growth performance. He gives examples of high growth performers, like Taiwan, Singapore, and Korea that stand rather outside off democracy area and also tells that Botswana and Mauritius succeeded to proceed to higher wealth level under fair democratic political system.

It is fair to say that we cannot make a bad or good judgment on democracy as influential factor to long-run growth rates of nations. However, since countries with authoritarian regimes tend to have lower incomes and lower secondary enrollment, Rodrik suggests that nations should embrace democracy as a safer choice.

2. Democracy Induces Lower Volatility

Whereas in the long run democracy does not give a robust outcome on impacts on growth performance, we can be more optimistic in the short run. In searching for such reliable relationship, Rodrik measures volatility of real GDP, real consumption, and investment in pure autocracy nations and pure democratic nations. Volatility here indicates short-term performance. He finds that the transition from pure autocracy nations to pure democratic nations significantly reduces volatility of real GDP, real consumption, and investment. Evidence tells that democracy is conducive to lower volatility in economic performance.

The possible explanation regarding this result is the importance of local knowledge. More democratic means more political participation means more collective understanding on economic decisions of certain societies. There is no harsh enforcement of someone's economic decisions, whether to consume more or less, produce more or less, invest more or less, etc. Hence, the level of consumption, GDP, and investment will follow economic incentives based on local knowledge and circumstances. This means that societies determine their own fate because they are the only ones who know what they want, what they are capable of, and what they should do, more than the government does.

3. Democracy Handles Shocks Better

Rodrik finds that greater institutional and operational independence of the executive and lower levels of political access by non elites affects positively growth but declines in a highly significant amount. These outcomes strongly suggest that political regimes with lower executive autonomy and more participatory institutions handle exogenous shocks better. To show that this kind of relationship still holds⁷, he takes the examples of recent experiences of Thailand and South Korea in more successful way of managing to rise from deep economic slumps than that of Indonesia.

4. Democracy and Income Distribution

One of the most influential findings about relationship between democracy and income distribution is provided by Alesina and Rodrik (1994) which suggests that democracy supports income distribution and economic performance to be more equal and higher than what authoritarian can do. However, they recognize that their finding does not imply any type of correlation between regime type and growth. There are two objections. First, we can see redistributive pressures prevail not only in democracies but also in autocratic countries. A dictator might fear being overthrown by peasants, for instance. Second, the nature of the regime and its preferences highly determine the weight of importance of growth in an autocratic country. A pro-capital regime would minimize redistribution and maximize growth through more capital accumulation, while a populist one would do the opposite to retain its popularity among lower income societies.

This finding is vindicated by Rodrik (1999b). He finds a robust and statistically significant association between the extent of political participation and wages received by workers, controlling for labor productivity, income levels, and other possible determinants. The mechanism works more or less this way: surplus of enterprises induce demand for increase in wages by workers; since democratic countries allow and give high appreciation to negotiations and alike, workers' demand is more likely to be granted than in autocratic one. This evidence, thus,

⁷ In Rodrik (1999), it is explained how countries with greater political freedoms during the 1970s experienced lower declines in economic growth rates.

can be used to predict which countries are more democratic by looking at level of income and wages distribution that exist in those countries.

2.3.3 Difference in Economic Institutions

Empirical findings have clearly stated that countries with better institutions exhibit healthier economic performances than those with lower quality. There are several views that can answer this seemingly entails curiousity question. Among other, the most relevant view to the case of Indonesia is social conflict view which is developed by Acemoglu, Johnson, and Robinson (2004).

This view states that groups that are holding political power at the time, rather than whole society, have the biggest chance to choose economic and political institutions. Hence, it is more likely for groups' interests to happen. They will choose economic institutions that maximize their own rents which is less likely to bring more welfare to the rest of society. They, for instance, will choose economic institutions that provide protection to their companies. Therefore, we would expect to see declining profits of those who hold dismal political power. We can say that political institutions play a more crucial role here compared to other views and, hence, there is a very influential part of social conflict theory of economic institutions. An example is close business relationship between *chaebols* in South Korea and the government. This social view is pertinent for the case of indonesian economy.

Finally, institutions may appear to be enticing for policymakers to boost a nation's economic growth, but it is important to note that reform or improvement in institutions quality is not found to be very useful in instigating growth, but rather sustaining growth (Rodrik, 2007). Another warning that is worth noticing comes from Dixit (2006). Dixit recognizes several shortcomings of research underpinning role of institutions on economic development in terms of giving any useful or reliable policy prescriptions.

He argues that unlike theories of economic growth that are mostly satisfied in giving definite answers, theories of institutions cannot do the same way. They offer different and, sometimes, conflicting answers. The theories' success stories are embedded in certain ideological fashions and very often failed in implementation due to impracticality in specific circumstances. Dixit urges policymakers not to draw many reliable and practicable policy conclusions from it. However, this does not rule out several common institutions that are required in any countries, such as independent and strong central bank.



CHAPTER 3

OVERVIEW OF INDONESIAN ECONOMY AND ITS DESCRIPTIVE GROWTH DIAGNOSTICS

Theoretical background explained in the previous chapter gives strong fundamentals to explain Indonesian economy and its descriptive growth diagnostics. This chapter now provides the overview of Indonesian economy during 1980-2005 and its descriptive analysis of growth diagnostics during the same period. Indonesian economy during that long period is explained with similar emphases, that is brief overview of state of Indonesian macroeconomic situation and policy reforms. Growth diagnostics conducted in this chapter does not withdraw any conclusion about Indonesian economy's most binding constraints during the period explained which might happen to lie in different sector. The empirical analysis of growth diagnostics and more elaborative explanation about the most binding constraint are to be delivered in chapter 5.

3.1 Overview of Indonesian Economy: 1981-2005

3.1.1 1981-1990: The End of Honeymoon

Early 1980s was the end of honeymoon for Indonesian economy. After reaping money from two oil booms that took place in 1973 and 1979, Indonesian economy was experiencing a little bump. This happened since in 1982, oil price started declining in a huge proportion. Moreover, it fell further in 1986, from US\$ 25/barrel in 1985 to just US\$ 13/barrel in the next year. This gave a major devastating impact to Indonesian economy. The misery was clearly depicted by Glassburner, *et al.* (1994, pp.).

"When world GDP growth dropped from 3 % in 1979 to 2 % in 1980 and in 1981, the drop in exports caused Indonesia's growth rate to fall to -0.3 % in 1982... nominal government expenditure was to be only 6 % above the level of the previous year...many projects were put under review...monetary policy was tightened..." (the average of GDP growth within 1972-1980 = 7.89 %) (p.33)

In addition, within this period Indonesian economy was searching a way out of this situation. The government formulated a two-stage reform. The first step, which was not a really profound reform, commenced in 1983, while the second one, which was huge, took off in 1986. Pangestu and Bhattacharya (1993) recognized these as a reflection of the need for a greater fund to resource mobilization and finance further development and also as a part to increase the efficiency and competitiveness of financial sector. These factors gave a way to several reforms concerning with motivation mentioned above. Those reforms regarded financial and capital market reform, banking reform, and investment climate reform which took place between mid and late 1980s.

3.1.1.1 Banking Deregulations: Competition Began

An important point of all reforms conducted by the government was headed for more competitive orientation reflected by the main features of firststage reform in 1983, namely removal of credit ceilings, controls on deposit and lending rate of state banks, subsidies on deposit rates paid by state banks, and reduction of number of credit categories financed by liquidity credit. No need to hesitate about this since prior to 1983, competition was violated by state banks acting as a tunnel to deliver oil money which got privilege of getting funds through liquidity credits from central bank at low interest rates. Consequently, the more competitive atmosphere came up to surface. The removal of interest rate controls created more competition in interest rates and deposits which later gave way for private domestic banks to double their growth rate in assets and credit intermediation. Further sharp fall in oil price in 1986 provided motivation for the government to induce more deregulation. They did not have sufficient money to prop up economic development through its generous yet seemingly futile. Realizing there was a need to innovate and boost economic growth, the government considered a revolutionary reform. Subsequent deregulations occurred in 1986, 1987, 1988, 1989, and 1990. However, the most detailed explanation will be emphasized on 1988 reform package as it was the most decisive financial policy initiative of the decade (Hill, 2000).

In 1988 it launched a reform package known as Pakto for which gave a clear picture of subsequent reforms in financial sector. This package removed most of entry barriers. It explicitly welcomed new players in banking sector by setting up the rule which stated that it took only Rp 50 and Rp 10 billion to create new banks, joint ventures and domestic banks respectively. It fulfilled the need of domestic and foreign banks to expand their branches. Also, existing sound domestic private banks are eligible for a foreign exchange license. In order to facilitate intermediation role, it reduced reserve requirement for demand deposits, saving, and time deposit. Deeper thought came to the government that it decided to stimulate the stock market too by introducing a 15 % tax on bank deposits.

The promised decent outcomes of these reforms can be seen from table 3.1. As can be analyzed, great reform in 1988 gave a positive impact in terms of growth of assets of private domestic and foreign banks. Within 1988-90, private domestic banks and foreign banks grew by 76.4 % and 74.4 % respectively, which were huge numbers compared to mere 42 % and 18.3 % in period of 1982-88. From this we can see how enticing the reform packages were to foreign banks, accumulating assets to nearly 80 % within less than a decade. Since then 52 new domestic banks (excluding small people credit banks), 15 new joint ventures and numerous branches have opened.

We can also analyze from this kind of features that foreign banks were somehow smarter in creating credit features than private domestic banks, let alone state banks. They managed to an unprecedented level of 50 %. Alas, private domestic banks and state banks managed to reach less than 10 % and more than -20 % of growth respectively. Nevertheless, we can still look at the bright side. There was an increase M2/GDP growth which indicated more money creation resulting from a surge in creation of term deposits. This was the outcome of very attractive term of deposit rates offered by private banks. M2/GDP grew by 70 % over the 1987-92 periods where the biggest increase occurred in 1989-90. However, there were negative impacts, as well. Higher deposit rates which were not balanced by proportional increase in lending rates led to huge amount of credits. This later gave birth to more complicated problems when triggered higher inflation and current account deficit (Pangestu, 1993).

1982-88	1988-90
21.7	27.5
42.0	76.4
18.3	74.4
39.4	19.4
25.0	44.6
-13.6	-31.9
37.4	36.7
73.0	80.7
30.2	79.7
27.6	49.3
1982	1990
21.9	0.8
63.4	56.1
9.5	36.7
53.0	6.5
100	100
	1982-88 21.7 42.0 18.3 39.4 25.0 -13.6 37.4 73.0 30.2 27.6 1982 21.9 63.4 9.5 53.0 100

Table 3.1. Features of Financial Development in Indonesia

Source: Pangestu (1993). Original source: IMF, International Financial Statistics, Bank Indonesia, Bapepam, and World Bank Estimates

3.1.1.2 Putting Some Make-up

The direction regarding foreign investment policy in Indonesia was alternating within this period. It was cordial in 1960s, while during 1973-82 it happened to be unwelcomed and cordial at the same time. It started to become cordial again in 1983-1990. This was partly due to government's heavy reliance on oil money. In earlier years of New Order government, early 1960s, there was a cordial welcome to foreigners reflected by incentives given. This had not been persistent up to the first oil boom in 1973. Sharp increase in national income allowed the government to intensify development mostly by itself. As easily predicted, the outcome was more inward oriented policies, such as anti-export bias industries and creation of various distortions, including trade regime distortions. The prevalence can be seen from growing controls on investment and finance, in the form of investment licensing and credit allocation at subsidized interest rates.

However, it was not so long until investors' interest started to show declining appetite and the Pertamina crisis in 1975/76. The investment climate got worse which forced the government to implement restrictions less vigorously (Hill, 1988). In order to regain investors' appetite, the government decided to form Board of Investment Authority (Bapepam) and introduced the priority investment list (*Daftar Skala Prioritas* or DSP). The DSP gave a clear explanation on which sectors that foreign investors may come in and in which sectors not allowed.

Nevertheless, efforts carried out did not give much as expected. Despite in the wake of second oil boom the government gave a way to foreign investors to take part in ambitious heavy industry program, many of projects announced before were never implemented as indicated by the large gap between realized and approved foreign total investments in 1982 and 1983, which reflected complex bureaucratic procedures (Hill, 2000). Actually, there was a moderate yet meaningful increase in 1983 since it was the year of low economic growth. And yet, it can be said that it was not because of increasing investors' interest due to the appeal of projects, but more of seeking tax incentives. This was vindicated by a major decreasing in the next three years when the tax incentives program was no longer in place (Table 3.2). When the second external shock hit Indonesian economy, the government launched the first reform package regarding relaxation and exceptions in May 1986, which was called Pakmei. This program's objective was to promote export oriented investments in East Indonesia and the capital market. The main attractiveness of this package rests in the cut of minimum requirement from 20 % to 5 % for PMA projects located in remote areas; extended 30 years of license for joint ventures which required PMA to increase their capital for expansion or diversification.

The government felt that it was not enough so they decided to conduct more extensive liberalization in 1987 and 1989. Both programs were concerned with minimum capital requirement, share of part ownership, participation in capital market, and sectors opened for foreign investors. During these periods of reforms the government also had reduced the number of licenses required from 26 to 13 and then removed the levies associated with the investment application processes responded to investors to simplify the process (Prawiro, 1998). Apparently, these reform packages appeared to succeed in inviting more foreign investments, at the very least we can see from the rise of approved investment in 1990, US\$ 8.7 billion which was three times higher than 1982 investment level, US\$ 2.4 billion (see table 3.2).

Last but not least, suffice to say that macroeconomic condition during that period was quite buoyant. In managing economic growth the government seemed to successfully be back on the right track after slipped down in 1982 when the growth rate was -0.3 %. The government could walk tall in an apparent manner if we see from Indonesian economic growth averaged at 4.9 % within 1983-90 (see table 3.3). In addition, inflation level stood at moderate level, slightly more than 8 %. However, past policies should not be ignored that way. It is echoed by Glassburner, Nasution and Woo (1994) who suggest that policies in 1970s regarding prudent fiscal, external debt and exchange rate contributed positively.

Year	Domestic Investment Approval	Foreign Investment Approval
1973	1,465	655
1974	554	1,417
1975	593	1,757
1976	672	449
1977	1,386	328
1978	1,715	397
1979	1,242	1,320
1980	4,493.30	1,074.40
1981	3,626.30	706.5
1982	5,470.50	2,416.90
1983	7,124.30	2,470.80
1984	2,055.60	1,096.90
1985	3,362.90	853.2
1986	3,438.40	847.6
1987	6,356.20	1,520.30
1988	8,423.40	4,410.70
1989	11,069.90	4,713.50
1990	30,662.20	8,751.10

Table 3.2. Domestic and Foreign Investment Approval, 1973-1990

Source: Board of Investment taken from Pangestu (1996)

Table 3.3	. Change in	Real GDP	(%) usin	g 1983	weight
			(0	

Year	Growth (%)
1981	7.4
1982	-0.3
1983	3.3
1984	6.0
1985	2.4
1986	4.0
1987	3.9
1988	5.7
1989	7.4
1990	7.1

Source: World Bank Data

Reforms	Main Contents	Effects
 <u>FINANCIAL</u> 1. 1983, June (Pakjun) → Banking Deregulation 2. 1986, October 3. 1987, October (Pakto) 4. 1987, December (Pakdes) 5. 1988, December (Pakdes) 	 Removing interest rate control for state banks Reducing liquidity credit Removing credit ceilings Removing ceiling on central bank swap Opening up licenses for new banks, including joint ventures Lending limit regulation Lowering reserve requirement Deregulating capital markets Reducing government role in stock exchange Allowing foreigners to buy stock Further capital markets deregulation 	 Rise in deposit rates Some fall in intermediation costs Increase in liquidity credit Opening up of many banks and joint ventures Intense competition between banks Rising interest rates and falling spreads initially Sharp increase in capital market activity and index
	 Rationalization of financial	Many major corporations
<u>INVESTMENT</u> 1. 1986, May (Pakem) 2. 1987, July	 95 % of foreign ownership possible for export oriented foreign investments Export oriented firms allowed to distribute domestically Joint ventures can participate in government export credit scheme Deregulation of investment & capacity licensing Broad banding Closed sector open to export oriented firms 	 Improving investment climate and encouraging export Improving investment climate
 3. 1988, November 4. 1989, May 	 Allowing joint ventures to distribute own products domestically Removing priority scale list for investment through board of investment 	• Improving investment climate and easing investment application

Table 3.4. Deregulating Policies, 1983	-1989
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Source: Pangestu (1996)

3.2 1991-1998: When the Bliss Ended

Indonesian economy finished the period of 1980s with real growth rate averaged at 4.7 %, inflation rate at 10 % and approved investment level at US\$ 11 billion. This is a somewhat convenient position, considering rocky situations at that era. Similarly, the economy was experiencing ups and downs for a few times. After enjoying an unprecedented rise in approved investment level in 1980s, it started to fall in the early 1990s. The government started to think very hard to feel the joy again. The new era of liberalization began again in 1992. The serious effort to commence a new liberalization package was due to high inflation and increased current account deficit, small friction of negative exogenous effect of external foreign investment actors, and added further by declining perception of investment climate in 1992 (Pangestu, 1996). Consequently, the big policy reforms were run in 1992, 1993 and 1994.

In fact, those reforms appeared to rather violate nationalism which included a full foreign ownership in certain areas for a quite long time and other requirements, like export orientation and technological contained products. The initial one came in 1992 where foreign investors are allowed for 100 % ownership and the general phase down requirement was extended to 20 years. But this only applied to those investments over US\$ 50 million located in Eastern Indonesia and located in a bonded zone with all of its production exported. Further relaxation was including minimum capital requirement on foreign investment.

As the reforms were felt insufficient due to decline in the growth of nonoil exports and foreign investment approval in 1993, and also caused by the increased competition for trade and investment in a highly competitive global environment, the government launched another package in 1994, which was the 'big bang' in the 1990s era (Pangestu, 1995).

When Indonesian economy was enjoying high growth rate at the average of 7.38 % during 1991-1997 due to decent formulations of reform packages and other policies, it suddenly dropped to -13 % in 1998 due to economic crisis spreading all over Asia. This economic crises originated in Thailand when in July 1997 its Baht was overvalued which precipitated major capital reversal

disseminating all over Asia. There was rational panic following each episode of this abrupt capital reversal (Radelet and Sachs, 1998). Indonesia got severe and sudden hit from this crisis, it was unfortunately unpredictable as noted by World Bank in its report⁸.

This situation is intriguing. There was something wrong with the economy. This sudden sharp drop was the other interesting feature of Indonesian economy during 1990s. This issue would be explored in more details based on the view of short-term debt as the culprit, even though there is another view which states that Indonesian political stability during Soeharto was to blame (Sadli, 1998).

3.2.1 Economic Crisis 1997-98

The view of financial liberalization leading to boom of short-term debt as the culprit is based on Matsumoto's view (Matsumoto, 2007). Indonesia, according to Hill (2000) and Matsumoto (2007) was not ready to liberalize its capital account which was conducted in 1970. It is presumed that it violates the conventional wisdom in sequencing liberalization thought, but, interestingly, Indonesian economy did not seem to take the curse (Hill, 2000).

In brief, Indonesian economy was rather uncertain, in terms of channels of investment. In 1960s, early 1980s and mid 1980s, it invoked foreign investment when its capacity to fund was found wanting, but it could suddenly reverse its policy its capacity to fund was found abundant, which happened in 1970s. The main consequence that potentially dragged it into deep crises was domestic private companies heavy borrowing during 1990s, especially within finance boom period 1994-97. During this period total amount of foreign borrowing increased substantially from US\$ 30.1 billion in 1994 to US\$ 62 billion in 1997. Overall, Indonesia accumulated up to US\$59 billion of total debt outstanding to foreign

⁸ See World Bank, "Indonesia in Crisis: A Macroeconomic Update," (Washington, DC: The World Bank, 1998).

commercial banks (Sharma, 2001). This was due to cheaper offshore loans than that of domestic (find the amount of FDI, debt and portfolio flow).

A country can borrow as much as it wants as long as it is used to develop productive sectors. This, apparently, did not apply to Indonesia. The biggest proportion was allocated to non-tradable sector, such as property, instead, especially in Jakarta (Sender, 1994). Indeed, 42.4 % out of total amount of foreign borrowing went to conglomerates, including top five companies, such as Sinar Mas, Salim and Astra. (see table 3.5). This was associated with potential harmful risk when those companies collapse. This worry met reality when they defaulted⁹.

In general, private companies got severe hit in 1997/98. In 1997, almost half of non-financial companies, 47.5 %, incurred losses on the average of Rp27.3 billion (US\$9.4 million) per company. A year ahead, the loss took a bigger place, that was 58 % non financial companies incurred losses on the average of Rp92.8 billion (US\$9.1 million).

Significant proportion of short-term debt dominated Indonesian economy several months before the crises in 1997. The proportion was so big compared to both reserves and GDP at that time. In the mid-1997 the accumulation of short-term debt with one-year tenor stood at US\$33 billion, more than 30 % out of total country's foreign debt that stood at US\$144 billion (60 % of GDP). The ratio of

Funding Amount						
	1993	1994	1995	1996	1997	Average
Top 5	42.4	38.3	22.8	29.2	18	25.7
Top 10	50.5	47.4	32.6	39.5	27.7	35.5
Top 15	56.7	49.2	35.9	46.4	33	40.6
Тор 20	63.5	54.7	41.5	49.6	34.9	44.3

Tabel 3.5 Concentration of Debtors that Borrow Offshore

Source: Matsumoto (2007)

⁹ For detailed explanation on how were their performances which led them to state of default, see Chapter 10 in Matsumoto (2007).

it to reserves is 1.7 (see table 3.6). The ratio that exceeds 1 is not directly associated with economic crises, but this situation is susceptible to crises because when something happened leading to domestic withdrawal, one can see reserves depleting since the creditors are insisting on debt payments.

There was a major and sudden reversal on capital flight in 1997 which gave a devastating effect to Indonesian economy. Rupiah exhibited unprecedented level of depreciation, namely 700 %, which led to sharp fall in import growth causing the private companies to bankrupt. Table 3.7 shows the shock to Indonesian macroeconomic stabilization

Year and Country	Short- term debt	Reserves	Rati
Mid-1997			
Indonesia	34.7	20.3	1.
Malaysia	16.3	26.6	0.
Philippines	8.3	9.8	0.
Thailand	45.6	31.4	1.
Korea	70.2	34.1	2.
Total	175.1	122.2	

Table 3.6 Debt to Reserves Ratio

Source: Radelet and Sachs (1998)

Real GDP contracted for more than 13 % and inflation level skyrocketed to 77 % in 1998. The deep slump still characterized Indonesian economy in the following year. The economy only grew by 0.8, whereas inflation level dropped significantly to 1.9 %. Nonetheless, we should be very cautious on it because the low inflation level was mainly due to major declining purchasing power of consumers, which is a negative signal. The Indonesian economy in the 1990s era was really interesting to explore, for sure. Moreover, there was a notable transition of government.

	1995	1996	1997	1998	1999
Real GDP growth (%)	8.2	7.8	4.7	-13.1	0.8
Inflation (CPI, Dec/Dec., %)	9	6	10.3	77.6	1.9
Current Account Balance (US\$ billion)	-6.4	-7.7	-4.9	4.1	5.8
Export Growth (US\$, %)	13.4	9.7	7.3	-8.6	-0.4
Import Growth (US\$, %)	27	5.7	-2.9	-34.4	-12.2
External Debt (US\$ billion, end-period	113.7	121.1	146.6	159.8	158.4

Table 3.7 Macroeconomic Features of Indonesian Economy, 1995-99.

Source: IMF and Recent Capital Account Crises (2003)

3.3 1999-2005: Years of Transitional Economy

The year of 1998 was a watershed for both Indonesian economy and political condition, as pinpointed by Hill (2006). According to him there were seven factors affecting economic policy-decision making during this period. First, a weakened presidency, though it was somewhat strengthened by the direct election process in 2004. Next, significantly weaker cabinet unity. Third, a newly assertive but unpredictable parliament. Fourth, a suddenly noisy and influential civil society. The next one is a still powerful but circumscribed bureaucracy. Sixth, a legal system not yet able to perform the heavy responsibilities suddenly thrust upon it. The last is the shift of power and resources from the centre to the regions.

Seven key factors explained above extract the gist of period 1999-2005 that there has been more scattered power, which could be ambiguous. On the one hand, it is good to have more participation and supervision from parliament which is supposed to be more concerned with people's interests. On the other hand, there are indications that louder voice of parliament that marked significant change in political architecture somehow held back the reform progress rendered by the government (Narjoko and Soesastro, 2007).

From 1999-2005 and ongoing year the government have tried vigorously to boost its economic growth and stabilized its macroeconomic condition so that it could climb up to the level before 1998. It was a daunting task, indeed. Moreover, in 2003 the government ended its IMF-monitoring program. Nonetheless, the government gassed up. Several reform policies regarding investment, infrastructure, institutions, financial, and regional autonomy have been launched.

Within this period I would depict reform packages and other policies during 1999-2005 that were the most worth noticing: public finance, tax administrative, labor market, regional autonomy, and investment in infrastructure (see table 3.8).

1. Public finance

This reform was to improve a sound system of public finance management and good governance. This emphasized transparency and more discipline reflected by accentuation of auditing process through deploying more BPK resources; transparent budget execution and budgetary process between parliament and government; and determination of fiscal sustainability (the size of government deficit was not to exceed 3 % and the ratio of government debt to GDP may not exceed 60 %).

2. Tax administrative reform

This reform aims at increasing tax revenue collection through implementation of some ambitious goals, such as establishing a special unit (large taxpayers office, LTO) to pursue large taxpayers and to create more efficient and effective tax system. This kind of tool was intended to increase flexibility of fiscal policy in promoting economic recovery. This reform was very important considering a quite significant decline in tax revenue as % of GDP, from 15 % within 1991-98 to just 12 % within 1999-2005.

3. Labor relating reform

There was a reform in labor market which allowed greater freedom of labor to negotiate and organize (Hill, 2006). This is such a big change as in

Soeharto's era, there was more limited freedom for labor implicating limited democracy. The key elements of this reform included regulations on severance payment, province-based minimum wages, delivery of salary while striking occurs and outsourcing labor use.

4. Regional autonomy

This policy was arguably the most apparent indicator of regime transition from authoritarian to rather democratic. The main impetus of this reform policy was recognized as big threats from several regions to separate from Indonesia rooted in regions' inability to stand on their own feet in creating more selfsufficiency (Hofman and Kaiser, 2002; Hill, 2006). Understandably, this policy aimed at reducing fiscal gap between the worse-off region and well-off region. The interesting point of this policy is that more power to local governments to collect revenues that significantly marked significant political shift from central government to local governments. However, more power on the hands of local governments has been abused, taking form in high-cost economy.

5. Investment

The effect of economic crises in 1998 on infrastructure condition was harmful. Infrastructure has been deteriorating in an unexpected way. Alas, there has been insufficient money to tackle this problem. Hence, in order to attract private investors, either foreign or domestic, the government made several regulatory frameworks in following sectors: telecommunication in 1999, oil and gas in 2001 and new electricity law in 2002. Unfortunately, these reforms in regulatory frameworks seemed to be in vain.

The reforms were seemingly promising to boost economic growth, what were the outcomes? The flow of net FDI as % of GDP had not been back yet to the level of period 1991-98 even though there was slight chance of getting better, so had level of gross fixed capital formation (see table 3.9). Whereas, the economic growth rate had turned out to be more promising. After going through dark years when the economy contracted for about 17 basis points from about 4 % in 1997 to -13 % in 1998, macroeconomic conditions seemed to show stable

performance years ahead. In 1999 the economy grew by 0.8 % and in 2000 it soared to 4.9 %, when in 2001 it slowed down to 3.8 %, it rose again up to more than 5 % in the next years (see table 3.10). Overall, economic growth rate of 4 % was quite good for Indonesia which recently got a severe hit.

No.	Reform Policy	Year	Legal Foundations
1	Public Finance	2003	State Finance Law No. 17/2003
	Tax		
2	Administrative	2003	-
3	Labor Market	2003	Labor Law No. 13/2003
	Regional		Law No. 22/1999 and No.
4	Autonomy	2001	25/1999
			which were later replaced by Law
			No. 23/2004 and No. 33/2004.
		1999,	
5	Investment	2001,	-
		2002	
	Source: author's comp	ilation	

Table 3.8 Summary of Reform Policies

	Gross Fixed Capital	FDI, net
Year	Formation	Flow
1991	27.00	1.16
1992	25.77	1.28
1993	26.28	1.27
1994	27.57	1.19
1995	28.43	2.15
1996	29.60	2.72
1997	28.31	2.17
1998	25.43	-0.25
1999	20.14	-1.33
2000	19.85	-2.76
2001	19.23	-1.81
2002	19.00	0.07
2003	19.29	-0.25
2004	21.68	0.75
2005	21.97	1.83

Table 3.9 Gross Fixed Capital Formation and Net Flow of FDI (% of GDP)

Source: WDI

Year	Growth (%)
1999	0.79
2000	4.92
2001	3.83
2002	4.38
2003	4.72
2004	5.05
2005	5.60
Source: WDI	

Table 3.10 Real GDP Growth

3.4 Searching What Holds Back Indonesian Economy: 1980-2005

The interesting story of Indonesian economy during 1980-2005 has been explained, now it is the turn for growth diagnostics during the period. This sub section is devoted only to descriptive analysis, while its empirical analysis is delivered in chapter 5. As HRV (2005) suggest that growth diagnostics of an economy is aimed to find a sector which exhibits the most binding constraint. Hence now it must inhibit one of the sectors following: low social returns, high cost of finance or, above all, related to institutional issues.

3.4.1 Is Private Investment in Indonesia Low?

From the early 1980s through 1998, gross domestic investment in Indonesia had not been outstanding compared to other ASEAN country members, especially with Singapore which stood at exceptional level, 39 % of its GDP level. However, 28.95 % of GDP level was not that bad, considering in 1970s Indonesia was rather closed to foreign investment. Deregulations in banking sector and investment climate in 1980s seemed to function very well in stimulating fatigue investment level (Goeltom, 1996). Unfortunately, after the Asian economic crisis smacked the economy, the confidence level of foreign investors to Asian economy was shaken, including Indonesian economy.

They seemed not to be leery again to Indonesia; it just attained an average level of 20.17 % after crisis, far less that of before crisis. Interestingly, this did not apply to China. As we can see from table 3.11, that when investment level in several Asian economies after the crisis declined, China managed to enjoy slight increase by 2 % from 37.7 % before the crisis to 39.2 % after crisis.

After crisis, sectors dominating the economy shifted from industry to services. Both domestic and foreign investors seemed to have the same intuition (see table 3.12). In 1980s and 1990s, both domestic and foreign investors primarily invest their money on manufacturing industry, averaged at 60 %. And yet, in 2005, they both seemed agreed to invest more in services sectors accounting for 33 % and 32 % of total investment for domestic and foreign respectively. According to ADB¹⁰, low investment level after crisis was significantly caused by infrastructure bottleneck. It is logical to think it as the culprit since services appeared to be less intensive in infrastructure usage.

Table 5.11 Gloss Capital Formation (70 01 GDT	Table 3.11	Gross Capital Formation	(% of GDP
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Gross Capital Formation (% of GDP)	average 1980-1998	1999	2000	2001	2002	2003	2004	2005	average 1999-2005
Indonesia	28.95	20.14	19.85	19.23	19.00	19.29	21.68	21.97	20.17
Vietnam	(lack data)	27.63	29.61	31.17	33.23	35.45	35.58	35.45	32.587
Thailand	33.52	20.50	22.84	24.10	23.80	24.92	27.09	31.64	24.98
Singapore	39.25	32.18	33.30	26.45	23.73	15.60	19.42	18.58	24.18
Philippines	22.48	18.75	21.17	18.97	17.67	16.83	16.79	15.14	17.90
Malaysia	32.54	22.38	27.30	23.93	23.78	21.62	22.74	19.94	23.09
China	37.73	36.75	35.12	36.27	37.87	41.2	43.26	43.87	39.2
Japan	29.9	24.85	25.44	24.75	23.07	22.85	23.04	23.37	23.91
Republic of Korea	33.1	29.12	31	29.33	29.08	29.96	30.36	30.06	29.84

Source: WDI online

As in Indonesia: the agrarian country, its agricultural sector's performance felt like lackluster. Due to unfriendly policies regarding this sector, it further declined from time to time. Let me turn to the composition of domestic and foreign investment. Domestic investors surpassed foreign investors by significant number. Within 1999-2005, domestic investment stood at the level of more than Rp 50 trillion, whereas foreign investment stood only at Rp 13 trillion.

¹⁰ See its report on Asian economy: ten years after crisis in Asian Development Outlook (2007).

Foreign and Domestic Investment by Sector, 1980				
and 1992	For	eign	Dom	estic
	1980	1992	1980	1992
Industry	82.8	68.5	80.4	69
Mining and Qaurrying	14.7	6.1	2	1.1
Manufacturing Industry	67.2	61.4	78	67.3
Construction	0.9	1	0.4	0.6
Services	7.3	28	8	16.6
Trade, Hotel, and Restaurant	2.7	11.6	1.6	7.2
Transport and Communication	1.7	2.6	3.3	2.6
Real Estate and Business Services	2.6	11.8	2.8	4.6
Other	0.3	2	0.3	2.2
Agriculture, livestock, forestry, and fishery	9.8	3.4	11.6	14.4
Total	100	100	100	100

Table 3.12.Foreign and Domestic Investment by Sector (%)

Source: Hill (2000)

In terms of attracting FDI, as can be seen from table 3.13, Indonesia was inferior to other Asian countries, both pre crisis and after crisis period. The main cause could rest in low cost of capital that domestic investors outnumbered foreigners, or low return and high risk economy.

Table 3.13 FDI (Net flows, BoP current in billion US\$)

FDI (current US\$)	avg. 1980- 1998	1999	2000	2001	2002	2003	2004	2005	avg 1999- 2005
Indonesia	1343233.3	-1865600	-4550400	-2977400	145090	-596920	-1511900	2194900	-1308890
Vietnam	data)	1412000	1298000	1300000	1400000	1450000	1610000	1889000	1479857.1
Thailand	1393314.7	5756900	3389000	3548600	847670	1461400	1607500	4227700	2976967.1
Singapore	2451184.7	8561800	10581000	-4644600	4903100	7238600	6323000	14544000	6786700
Philippines	590684.21	1114000	2115000	335000	1477000	188000	109000	970000	901142.86
Malaysia	2477134.7	2472900	1761600	287110	1298700	1103700	2562900	993680	1497227.1
China	13653116	38753000	38399300	44241000	49307977	47076719	54936483	79126731	50263030
Japan	809681.24	12308393	8227199.7	6190971	9087241.6	6238249.6	7804793.8	3213628	7581496.7
Republic of Korea	1065705.3	9333400	9283400	3527700	2392300	3525500	9246200	6308500	6231000

Note: This FDI is measured out of BoP. Source: World Development Indicators online.

3.4.2 Is the cost of capital in Indonesia high?

Trying to answer whether cost of capital in Indonesia is high or not, we can see from the interest rate spread of commercial banks on average¹¹. Figure 3.1 shows that interest rate spread of Indonesia before crisis was the highest. This can be mostly explained by banking deregulations in 1983 and 1988 which induced intense competition among banks forcing them to offer as highest deposit rate as they could. Moreover, this trend can also be explained by heavy offshore borrowing by banks in 1990s, especially 1994 (Agung, 2000). However, this trend did not last long. After the crisis, banks were not so generous. Decrease of deposit rate was not proportionate to increase in interest rate spread, especially after the rising price of BBM for more than 100 % in 2005. Cost of capital, therefore, became relatively expensive. This reflects there was something new causing this trend. Is it the high risk in lending?

A study by Besar, Hadad and Santoso (2003) suggests that there are three factors regarding high cost of capital intermediation. Firstly, banks had excessive liquidity that they did not want to take parts in tight competition among themselves. Secondly, high revenue extracted from placing their liquidity in SBI and bonds. Thirdly, inaccurate appraisal in risk assessment made them avoid the risk by raising lending interest rate. All three arguments explained above reveal one culprit: high risk premium in lending. This is confirmed by figure 3.2 which shows that when a decline in inflation rate was followed by an increase in spread interest rate. This suggests risk premium.

In addition, there is savings. In 1980s savings movement can be mostly explained by banking deregulations. However, overall savings have been somewhat determined by movement of current account balance. Trend of Indonesian domestic savings has been undergoing downward slope. Its level has been inferior to savings of other Asian countries, as can be seen from figure 3.3. This needs further attention.

¹¹ Interest rate spread is lending rate minus deposit rate. It can be regarded as the cost of capital assuming borrowers also have some deposit in a bank.



Figure 3.1 Deposit Rate and Interest Rate Spread in Selected Asian Countries

Figure 3.3 Gross Domestic Savings (% of GDP) of selected Asian

Countries



46 Indonesia's growth diagnotic..., Armand Arief **SINI, HERGI**, **T2009** INDONESIA These facts confirm that firms are reluctant to borrow from banks. According to Goeltom (1995), during 1981-1988, the average cost of borrowing increased from 16.9 % to 20.6 % occurred only to industrial sector implying more opportunities for small firms to domestic credit. However, this study also suggests that there was lack of investment demand by less indebted medium-sized firms, despite their absolute higher rates of return. This partly reflected there was something wrong with selection in channeling credit to firms, confirmed by unclear relation between capital formation and lending interest rate which tends to arrive at the state of investment demand constraint (see figure 3.4).



We can also find an alternative explanation from a finding by Agung (2000) that suggests companies associated with banks and business groups have some privilege in terms of greater access to long-term debt financing. Apparently, situation happening in 1990s where commercial banks preferred large firms to small medium enterprises (SMEs) is adamant. Average of total credits delivered by commercial banks to large firms within 2000-2005 is 80 %, whereas credits delivered to SMEs, which in 2003 contributed for more than 50 % of GDP, in the same period averaged only 18 %.

What about the nature of international finance in the economy? The average of external debt seemed to have no problem with country's risk or alike until 1998. Figure 3.5 shows the economy was fond of borrowing offshore,

especially in 1994. And yet, after 1998 there was a decline following major fall of confidence level among foreign investors. This can be primarily explained by major default by major companies having political ties¹². This might have something to do with supervision by the government authority.





Source: WDI online

3.4.3 Is Return to Economic Activity Low?

Infrastructure problem seemed to be the old chronic problem that has not been resolved yet. In 1985, so as to resolve binding problems occurring at ports, President Soeharto issued Presidential Instruction Number 4/1985 regarding highhandling cost, transport cost, and complex administrative problem. The government appointed foreign private surveyor organization, namely SGS to serve the job. The effect was quite remarkable. It managed to reduce substantial time to import and export clearance (Pangestu, 1996).

Actually, in 1980s investment projects approved in Indonesia grew substantially despite sharp fall in government income and huge debt which led to major fall in infrastructure provision by the government. This increase was largely

¹² Several big companies that are allegedly to have close political connection to the government: Sinar Mas Group, Salim, Astra, Gajah Tunggal, and another company dominated 42.4 per cent of total amount of foreign borrowing. This kind of foreign borrowing is the culprit of deep slump Indonesian economy in 1998. For more detailed explanation, see Matsumoto (2007).

caused by private investors who saw golden opportunity in this area. During 1980 to early 1992, Indonesian economy watched an incredible surge in physical infrastructure, especially in electricity production which accelerated up to 14 % (Hill, 2000). This can be said that this indicates that paucity of infrastructure was one of the most binding constraints to Indonesian economic growth. Investors tried to fulfill their own needs in electricity. However, this huge expansion was also largely due to massive liberal reform package in 1989.

Apparently, hypothesis stating infrastructure as one of the constraints to growth of Indonesian economy might be true. As reported by Bappenas (2003), ports problems reemerge as one of the most concern policy issues to exporters. They include competitiveness in port handling fees, which is among the highest in the region, and productivity issues, which is among the lowest in the region. Hence, do not be surprised to hear if *Asian Development Outlook* (2007) concludes that infrastructure bottlenecks remained significant explanatory variable for low investment in Indonesia, even ten years after the crisis.

Another recent survey of doing business by *World Bank* (2008) suggests that Indonesia is terrible in port management compared to its Asian competitors, although it is explicitly depicted that its performance is superior to African countries (see table 3.14). A prior study by LPEM- FEUI (2007) walks in the same vein. It finds that respondents perceive quality ports, electricity, road, water supply, and telecommunication as the most troublesome infrastructures (see table 3.15).

In fact, long before this study was conducted, the government already noted these problems. Several policy packages have been launched. In 1999 the government launched regulatory framework in telecommunication; in 2002, it launched new electricity law. Unfortunately, these reforms in regulatory frameworks seemed to be in vain. Not as expected, the effect on investment was changing implying uncertainty in policy implementation. Even though provision of adequate infrastructure is largely due to lack of proper budget allocation on it, as identified by Kong and Ramayandi (2008), it is not fair to blame it as the main cause. According to Narjoko and Soesastro (2007), there are four reasons that can further explain this problem: no clear objectives, lacked appropriate institutions, government intervention through incumbent state owned enterprises monopoly and pricing policies in infrastructure. All the problems seem to lie in the heart of blur vision of the government and its high motivation to intervene.

Region or Economy	Time for Export (days)	Cost to Export (\$ per container)	Documents for Export (number)
OECD			
East Asia &	9.8	905	4.5
Pacific	24.5	885	6.9
Latin & Caribbean	22.2	1108	7
South Asia	32.5	1180	8.6
Sub-Saharan	35.6	1660	8.1
Africa	21	667	5
Indonesia	5	416	4
Singapore	17	615	7
Thailand	18	432	7
Malaysia	21	390	7
China	24	669	6
Vietnam			

Table 3.14 Time Needed for Export

Source: Basri and Patunru (2008); original source: World Bank (2008)

Table 3.15.	Index of	Infrastructure	Impediments.

Commodities	Electricity	Water	Road	Telecommunication	Port
Electronics	59.62	72.06	47.86	68.63	43.46
Furniture	64.11	69.47	69.21	70.86	60.72
Agriculture	58.01	64.53	64.1	68.13	60
Textile	65.28	69.37	66.98	72.02	62.31
All	63.79	69.25	66.2	70.97	59.81

Source: Basri and Patunru (2008); original source: LPEM-FEUI (2007). Note: the index scale is 1-100, the higher, the favorable.

3.4.4 Is Human Capital Low?

In the past decades, Keyfitz (1989) notes that return on human capital in Indonesia was not very competitive. According to his analysis, between 1976 and 1986, money wages for those with less than primary school graduation increased in the ratio of 4.7, whereas those with university graduation increased only 2.65 at the ratio. This implies that the higher the education, the lower the return one can get, which means lower human capital in Indonesia.

Nevertheless, according to a study by *World Bank* (1993) total factor productivity (TFP) of Indonesia within 1960-1989 was 1.6 %, which is better than that of a finding within the period of 1983-1996 studied by Bank Indonesia modeling team which states that TFP of Indonesia within that period eased quite substantial to a level of 0.7. Decreasing TFP across these two periods means something bad. Factor productivity, including labor force productivity, slacked off. There seemed to be an increase in Indonesia's TFP. During 1985-2004 TFP of Indonesia was measured to stand at 1.71. This number means that within the period of 1996-2006, there was an increase in productivity. This development raises optimism because after sliding now it comes back again to the right trajectory. However, this number is not something that can be proud of since Thailand and Malaysia's TFP stood at level of approximately 2 (Bappenas, 2002).

The explanatory variable of this increasing productivity can be inferred from improvement in ICOR from 4.9 in 2002 to 4.5 in 2004. Within this period, there has been increasing in high-technology investment, such as transportation, telecommunication, chemical and pharmaceutical manufacturing, machinery and electronics industries (Goeltom, 2007). This positive trend can be explained by abundant global liquidity in early 2000s, partly due to worsening state of economy in the US so that investors invested their fund in developing countries hoping for higher returns. It is not purely human capital's matter. During almost the past two decades, 1990-2005, however, Indonesia's human capital quality has not been very impressive, compared to other ASEAN countries. It has been outnumbered in terms of proportion of high-manufactured product export (see table 3.16).

The theoretical explanation of using this proxy is when a country exhibits low level of income, it tends to export raw materials due to lack of skillful labor in processing more sophisticated products. However, when its level of income increases along with its human capital quality, it tends to export more sophisticated products because there are more high-skilled labors in this country. From this brief description, it can be seen that how low Indonesia's mastering level of technology. Its proportion was more than one-tenth from that of Singapore's, while in 2005 has been getting closer to only one-third. It is not so shocking if we look from the level of education of labor force in Indonesia. Those with tertiary education during two decades averaged only 3-4 %, whereas the highest proportion takes place in those with only primary education averaged more than 40 %.

High Technology of Manufacturing Export (%)	1990	2000	2005
Indonesia	1.23	16.16	16.30
Thailand	20.71	33.28	26.58
Singapore	39.66	62.56	56.58
Philippines		72.58	71.00
Malaysia	38.18	59.54	54.71

Table 3.16Export of High Technology Product (% of total export)

Source: WDI

Aside from labor productivity, there is additional explanatory variable to this, namely policies regarding wage of labor. Bappenas (2003) reported that investors complained about minimum wage policy that is too high and costly severance payment, compared to other countries in the region. In 2000, Ministrial Decree 150 concerning the determination of the minimum wage passed. There is a problem arise from this regulation. Workers, in effect, were encouraged to do demonstration when their demand on excessive claims on increasing wage and severance payment was not granted by companies. This resulted in increasing costs by the companies if they are to release some unproductive workers (Nardjoko and Soesastro, 2007). A study by LPEM-FEUI (2007) confirms this (see figure 3.6).

3.4.5 Is Corruption Level High?

Corruption among public servants in New Order era was notorious that it has arrived at chronic level. Almost most of bureaucrats felt no ashamed in conducting such thing. One might meet certain difficulties in revealing what the main cause was. Some studies tell that they were not paid well (Svenson, 2005), while others might say it stemmed from strong centralized power that they felt like the sole granting agents (Shleifer and Vishny, 1993). Nonetheless, its impact to Indonesian economic development was shockingly negligible. Indeed, economic grew substantially high at 7 % on average within 1980-1997, inflation was at single digit, and absolute poverty level decreased significantly.



Figure 3.6. Perceptions of Business Agents toward Investment Climate.

Source: Basri and Patunru (2008); original source is from LPEM-FEUI (2007)

Firms operating in Indonesia felt secure and ensured by paying unofficial money to government officials to get approvals, as told by Van der Eng (2004). They did not have to worry not to get approvals they wanted which could lead to another additional operational cost. What they needed to do is just waiting for the process. In addition, the costs related to illegal speed up business permissions could be foreseen before and, thus, can be included in calculation as transaction cost (Friawan and Perdana, 2007).

Uncertainty is very important for business. In the era of 'reformasi', there has been swing in corruption epicenter. Since the birth of 'big bang' reform in decentralization in 2001 marked by Law Number 22/1999 (Regional Autonomy Law) and Law Number 25/1999 (Fiscal Balance between the Centre and

Regions), trend of corruption seemed to follow it. Currently, corruption has decentralized, as well. At first, probably one of the ultimate objectives why government launched that policy package is to mitigate level of corruption which was adhered to the New Order government. Unluckily, it reversed to another extreme point. The arguments for this are higher cost for more regulations, unofficial payment leading to uncertainty issue. Decentralization begets increase in local regulations by local governments.

The reason is that because they need to increase their current local revenue because fiscal decentralization, in some regions, reduces local revenues. A study by Henderson and Kuncoro (2004) confirms the argument. They argue that there was strong correlation between more regulation and red tape by local bureaucrats, thus created more corruption. However, paying unofficial payment does not guarantee that you will get what you want. The result on business agents' perceptions are much complains on corruption as major impediments in investment. They feel practice of corruption in the era of 'reformasi' is more bloodsucking than that in New Order era, as depicted in table 3.17 This new trend of corruption confirms what is suggested by Shleifer and Vishny (1993) which argue that centralized corruption is better than the decentralized one.

Countries	1995	1996	1997	1998	1999	2000	2001	2002
Indonesia	7.3	7.7	8.7	9	9.9	9.9	9.7	9.9
Malaysia	4.6	5	5.8	5.4	7.5	5.5	6	5.7
Thailand	5.9	6.6	7.5	8.3	7.6	8.2	8.6	8.9
Vietnam	n.a	7.8	8	8.3	8.5	9.2	9.8	8.3
Philippines	6.6	7	6.5	7.2	6.7	8.7	9	8
Singapore	1.2	1.1	1.1	1.4	1.6	0.7	0.8	0.9
China	7.3	8	8.1	7	9	9.1	7.9	7
South Korea	4	5.2	7.7	7.1	8.2	8.3	7	5.8

Table 3.17. Level of Perceived Corruption in Selected Asian Countries

Source: Castle (2004); original source is from PERC Survey. Rankings are on a scale of 1-10, 1.0 is the least corrupt and 10 is the most corrupt.

It is very important to note that this picture is just until 2002 before House of Representatives (DPR) issued Law Number 30/2002 that formalized Corruption Eradicate Commission (KPK). Looking at short description shown in table 3.17, it can be inferred that the government need to be aware of threats coming from other countries that exhibit lower index, especially Malaysia, Thailand, Singapore, South Korea, and, of course, China. This worry that gave motivation for the birth of KPK. Its performance and impacts on mitigating corruption have been remarkable for a newly-formed organization that had no benchmarking before. At the very least, implicitly we can see it from findings from a study by LPEM-FEUI (2007). There is stark increase in positive perceptions of business agents on corruption, both conducted by local and central government taking place between end of 2005 to the mid of 2007. It is worthy to note that any policies implemented in 2007 are beyond the scope of this paper.

