# Investigating the Lee thesis: how bad is democracy for Asian economies?

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This paper discusses the hypothesis that democracy hurts economic growth and development, also known as the Lee thesis, and discusses why one could expect dictatorship to be particularly beneficial for growth in the Asian context. Three general theoretical arguments in support of the Lee thesis are then presented. However, the empirical results, based on panel data analysis on more than 20 Asian countries, do not support the hypothesis that dictatorship increases economic growth in Asia. There is no significant, average effect of democracy on growth. Asian dictatorships do invest a larger fraction of their GDP than democracies, but they are worse at generating high enrollment ratios in education after primary school.

Keywords: democracy; dictatorship; economic growth; development; Asia

#### Introduction: The Lee thesis

[M]any people in different countries of the world are systematically denied political liberty and basic civil rights. It is sometimes claimed that the denial of these rights helps to stimulate economic growth and is "good" for economic development. Some have even championed harsher political systems – with denial of basic civil and political rights – for their alleged advantage in promoting economic development. This thesis (often called "the Lee thesis" ...) is sometimes backed by some fairly rudimentary empirical evidence (Sen, 1999: 15).

Is dictatorship good for economic growth in developing countries, and particularly in Asia? Many believe so, and the last three decades' incredible economic growth in authoritarian China is often invoked as exhibit number one. Conversely, several non-democratic leaders, academics, and journalists have argued that democracy is bad for economic growth in poor countries. The notion that democracy hinders economic growth, and wider development, is often dubbed the Lee thesis, after former Singaporean Prime Minister Lee Kuan Yew's defense of this hypothesis. The underlying argument is that democracy, with its political rights, civil

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liberties, and political contestation, generates social instability or political gridlock, and democratic governments are therefore unable to generate rapid economic development. A strong, authoritarian leadership is deemed necessary to promote reforms, conduct efficient policies that are unaffected by special interest groups and generate high investment levels.<sup>1</sup>

This paper investigates the relevance of the Lee thesis in the geographical region where it is arguably most likely to hold, Asia. Democracy is defined here as a political regime with a high degree of popular control over political decision making, and a high degree of political equality (Beetham, 1999). Both 'dictatorship' and 'authoritarian regime' refer to regimes that are not democracies, although some analysts distinguish between these concepts (Linz and Stepan, 1996). This paper thus investigates the general effect, in Asia, of popular control over politics, which is related to the existence of free and fair elections, checks on political elites' power, political rights, and civil liberties. The second section presents arguments for why dictatorship might be *particularly* conducive to economic growth in Asia. The third section introduces general theoretical arguments indicating that dictatorships are conducive to economic growth, and some counterarguments. The fourth section discusses methodological problems related to inference and generalization from some Asian developmental regimes. The last section investigates the hypotheses that dictatorship is conducive to economic growth, high investment rates, and better education policies. Panel data techniques are used on a sample of 21 Asian countries, with data for some countries going back to the 1860s. The main conclusion is that relatively dictatorial regimes are no better at generating high economic growth than relatively democratic regimes. The Lee thesis as a general hypothesis does not find support, even in Asia.

## Why should the Lee thesis be especially relevant in Asia?

Even though some authoritarian countries have been successful in generating economic growth, general empirical evidence for the Lee thesis is lacking. Indeed, statistical analyses of *global* samples indicate either no effect (e.g. Burkhart and Lewis-Beck, 1994; Helliwell, 1994; Przeworski *et al.*, 2000) or a positive effect (e.g. Leblang, 1997; Baum and Lake, 2003; Knutsen, 2011) of democracy on economic growth. Moreover, Rodrik (2000) finds that economic growth under democracy is of 'higher quality' than under dictatorship, as democracies have less cross-country variation in growth rates, experience less volatility in GDP growth over time, manage external shocks to the economy better, and pursue growth with more egalitarian distributional outcomes.

Although democracy on average produces equal or higher economic growth rates; dictatorships vary more in their economic performances (Rodrik, 2000;

<sup>&</sup>lt;sup>1</sup> For reviews of literature supporting this view see Sirowy and Inkeles (1990), Przeworski and Limongi (1993), and Halperin *et al.* (2005). The hypothesis that democracy reduces growth has also been proposed by scholars studying Latin American politics (Feng, 1997: 392).

Besley and Kudamatsu, 2007). As Barro puts it, 'history suggests that dictators come in two types: one whose personal objectives often conflict with growth promotion and another whose interests dictate a preoccupation with economic development' (1997: 50). Some of the most profound economic miracles after World War II (WWII) have taken place in dictatorial Asian countries. Is there something special about Asian dictatorships? One explanation for why some dictatorships in Asia have grown so fast is that many Asian dictatorships, such as the military regimes in South Korea and the Kuomintang in Taiwan, faced severe external security threats (Knutsen, 2011). Only through economic development could these regimes improve their military capabilities enough to deter foreign adversaries. However, in the following I will present two common arguments as to why authoritarianism is more conducive to economic development than democracy in Asia. The first is a cultural argument related to the concept of 'Asian values', and how these make democracy a bad fit for Asian countries. The second is a political-institutional argument, indicating that Asian autocracies are different from autocracies elsewhere, and that they have been particularly good for economic growth.

# Answer I: Asian values

'Asian values' is argued to include 'the principle of benevolence, familism (with patriarchal authority), nepotism, authoritarianism, national consciousness, community spirit, fervor of education, hard work, and frugality' (Lee, 2003: 31). Asian values, it has been argued, make democracy less fit than autocracy as a mode of governance on the continent (Kim, 1994). It has further been argued that the combination of Asian values and autocracy is a good prescription for development (Sen, 1999), based on the 'interaction' between cultural and political factors and how these affect the economy.<sup>2</sup> Asians are supposedly positive toward hierarchical government and not very appreciative of political and civil rights. The claimed hierarchical and patriarchal Asian family values are thus transferred to the national level. The result is an elitist argument about the need for a strong and intelligent national 'father' to make important political decisions. In other words, the 'most able, and morally the most righteous and spiritually most advanced should share more responsibility of government' (Tu Wei-ming cited in Sikorski (1996: 830)), indicating that elites are also better at generating economic development without popular involvement.

Even if some scholars have delimited the Asian values-argument to East Asia, linking it to Confuciusianism, an expanded version of the argument also includes

<sup>&</sup>lt;sup>2</sup> Another interpretation of the argument is that Asian values make Asian countries more susceptible to dictatorship, which again improves economic outcomes. However, if the argument is meant to explain why dictatorship performs particularly well in Asia, there must be a positive *interaction* effect between Asian values and dictatorship on economic outcomes. Few have come up with plausible, specific mechanisms that could lie behind such an interaction, which is one reason why I am personally skeptical of the Asian values argument.

other parts of Asia. As Sen (1999: 232) notes, this expanded version is rather ignorant, as it does not appreciate the differences in cultures between Asian countries. However, limiting the Asian values thesis to East Asia is also problematic. Sen (1999: 231–238) shows that the argument relies on a selective reading of Asian classical philosophers, even Confucius, and historical patterns. Moreover, the empirical attitudes and values of Asian citizens do not differ substantially from citizens elsewhere, once socio-economic factors are controlled for (Inglehart and Welzel, 2006: 156). Historically, it is the political elites who have pushed for the notion of Asian values (Kim, 1994; Inglehart and Welzel, 2006: 289). It is therefore legitimate to ask whether the proposition of Asian values and their political implications is promoted because of self-interest rather than correctness.

# Answer II: Asia's model of developmentalist autocracy

Another argument for why dictatorship is particularly conducive to economic development in Asia, is the existence of a particular *type* of developmentalist autocracy in many Asian countries (Leftwich, 2000). Dictatorship is a sprawling category, defined primarily as an antidote to democracy, which contains several different regime types with different sets of institutions, structured according to different logics of governance (e.g. Linz and Stepan, 1996; Hadenius and Teorell, 2006). Here, I will not go into the interesting analytical possibilities related to a more fine-grained classification of regimes in the comparative politics literature, but it can, for example, be argued that the strong, dominant party systems existing in many Asian autocracies lead to specific economic policies conducive to economic development (Leftwich, 2000). I will focus instead on the political economy literature on East Asia's development miracles, and ideal-typical models of Asian-style developmentalist regimes.

The factors behind the development successes of the 'Asian Tigers' (Hong Kong, Singapore, South Korea, and Taiwan) have been vigorously debated. The World Bank's (1993) report on the subject focused on economic factors like savings rates, human capital accumulation, efficient domestic markets, export orientation, and prudent macroeconomic policies. Critics of the World Bank's report pointed to several explanatory factors lacking in its analysis (Gilpin, 2001: 321–329). For example, the Asian Tigers carried out creative and selective industrial policies. A variety of policies and incentive schemes such as cheap credit and tax breaks were provided, especially to exporting firms.

Then there are the political aspects: why were all these economic policies generated in the first place? In these countries, bureaucrats and politicians have often been credited for acting autonomously from interest group pressure. They have been willing to carry out tough reforms and follow a long-term perspective, for example, by promoting policies that contributed to a high national savings rate. To what degree were these factors connected to these regimes' authoritarian nature? Supporters of the Lee thesis would argue they were strongly connected.

Several ideal-typical models have been constructed from the successful East and Southeast Asian experiences. Wade (1990: 25-26) summarizes Chalmers Johnson's (1982) model, according to which the main features of Asian developmentalist regimes are: (1) economic development as the top priority of state action; (2) a commitment to private property rights; (3) elite bureaucracies as vital for economic policy formulation; (4) states engaged in consultation and coordination with the private sector; and (5) bureaucrats 'rule' while politicians 'reign' - politicians stake out broad political and economic strategies, while bureaucrats engage in specific policy formulation. The politicians hold the monopoly over political power, and the regimes are 'softly authoritarian'. Another model, which focuses more on policy than institutional factors, is Chang's (2006: 55) East Asian model, which includes: (1) pro-investment as opposed to anti-inflation macroeconomic policy; (2) control of luxury consumption; (3) strict control of foreign direct investment (FDI); (4) pursuit of infant-industry protection and export promotion; (5) intentional attempts to exploit economies of scale through export promotion; and (6) a dynamic productivity view of competition, rather than a static allocation view. Although Chang focuses less on political institutional aspects, some argue that the policies in this ideal-typical model are functions of the authoritarian political regimes in East Asian countries: dictatorships are better able than democracies to pursue certain policies, which again spur economic growth. This is the Lee thesis. Below, I consider three theoretical arguments that support the Lee thesis more in detail. These arguments relate directly to several dimensions identified in the models above.

#### Theoretical arguments for and against the economic superiority of dictatorship

Economic growth is the increase in economic production, or aggregate income, over a time period, and is usually operationalized as annual percentage change in GDP per capita. Despite vast differences between economic growth models (see e.g. Solow, 1956; Romer, 1990; Mankiw et al., 1992), an increase in economic output is assumed to come from either increases in productive inputs, physical capital, human capital and labor hours, or through increased efficiency. An increase in efficiency means that an economy produces more output for a given amount of productive inputs. Increased efficiency may result from increased division of labor, improved functioning of markets and other allocation mechanisms, and technological change. How can political regimes affect input accumulation or efficiency? Political regimes matter because they systematically promote different policies, such as investment policies and education policies, or because they affect certain economic institutional structures, such as the property rights system and bureaucratic structures. Policies and institutional structures are again important for input accumulation and efficiency (see e.g. North, 1990; Rodrik, 2000). The arguments below sketch out causal chains where dictatorship affects the probability of a certain policy or institutional structure being adopted, which in turn affects either input accumulation or efficiency, which in turn affects economic output.

#### Argument I: Dictatorship and investment

One common notion is that dictatorships 'are better able to marshal the limited resources available and direct them towards productive activities that will increase economic output' (Halperin *et al.*, 2005: 3). It is argued that democracies are vulnerable to pressures for mass consumption, and thereby reduced savings, which again reduces investment. Investment in physical capital is, as mentioned, one source of economic growth in traditional economic growth theory (Solow, 1956). However, also in 'new growth theory', which focuses on the importance of technological change, savings-, and investment rates matter since '[E]conomies with higher savings rates grow faster because they allocate (endogenously) more resources to inventive activities' (Helpman, 2004: 45). Thus, if democracy undermines investment in physical capital, dictatorship will have an advantage in promoting economic growth.

There are different varieties of the argument, but a common assumption is that the populace is shortsighted and wants immediate consumption, which reduces savings and investment. Democratic politicians are under pressure to redistribute resources to both private and public consumption, since consumers are also voters. Voters are assumed to punish politicians in the next election if their demands for consumption are not met. Dictators can more easily neglect pressures for mass consumption. In his analysis of the proximate sources of growth in the Asian Tigers, Young (1995) finds that capital investment was an important contributor to these countries' high growth rates. However, promotion of investment was also crucial for economic growth in other Asian dictatorships, such as Suharto's Indonesia (Ravich, 2000: 145–153).

Democracy likely increases consumption relative to dictatorship through several channels. One is the political redistribution of wealth. The rich, which as a group do not contain the 'median voter', are expected to save and invest a higher proportion of their income than the poor (Keynes, 1997: 96-98). Thereby, taxation of rich people in democracy combined with redistribution to the relatively poor majority is expected to lower savings and investment rates. Likewise, democracy increases consumption through increasing wages (Rodrik, 1999a). Freedom of association, including the right to form collective labor organizations, is an important feature of democracy, at least when defined broadly (Beetham, 1999). The right for workers to organize typically increases their bargaining power in the labor market, thereby generating higher wages. Workers are assumed to consume a higher share of their income than wealthy capital owners. Aggregate consumption therefore increases when wages go up and capital income down. Reducing wages through co-opting or coercing labor is one way to increase capital accumulation in dictatorships. In Singapore, the share of national income going to wages was very low, between 0.3 and 0.4, from at least 1970 to 1990 (Przeworski et al., 2000: 172). Labor in Singapore has been aligned with, and can even be described as co-opted by, the ruling People's Action Party government (Devo, 1998: 202). The numbers of labor disputes in South Korea and Taiwan in the 1960s were stunningly low, often in the single digits per year. Moreover, only a fraction of these were related to demands for wage increases (Cho and Kim, 1998: 140). This outcome is not solely due to intra-firm conditions, as '[S]tate agents and enterprise managers in private firms cooperated with each other to prevent workers' collective actions' (Shin, 1998: 13). Freedom of association has also been only weakly present or indeed absent in Malaysia and Thailand when ruled by the military (Deyo, 1998: 188).

Dictatorships may also discourage consumption and increase savings through failing to provide social security, welfare arrangements, and other government insurance schemes. Dictatorial governments need not provide as much social security to the population as democratic governments, because of lower political accountability and responsiveness. The response of rational citizens is to save privately when public alternatives are non-existent. Wade links the high household savings rate in Taiwan to the lack of social security systems, with people saving for old age and sickness. Taiwanese households also piled up savings to support expensive education for their children (Wade, 1990: 62–63). The lack of political responsiveness and accountability to the broader electorate in dictatorships allow political elites to bypass welfare, social security, and education programs. These are programs that a 'median voter' would likely care about and push for in a democracy.

In Taiwan, Wade (1990: 62) shows that national savings from 1956 to 1979 were mainly driven by high government and household savings. Only around 10% of national savings came from private corporations. The lack of social security, subsidized higher education, and housing programs not only pushed households to save more; they also allowed the government to save tax revenue. High government savings led to high public investment in Taiwan. Public sector investment made up about half of the economy's investments in the 1960s and 1970s (Wade, 1990: 173).

Dictatorships can also impose direct regulations that curb consumption, which arguably are unpopular and thus not viable in democracies. One example is the regulation of luxury consumption in East Asia. These countries 'imposed heavy tariffs and domestic taxes on, and sometimes even banned the domestic production as well as the import of, certain "luxury products"' (Chang, 2006: 25). One example is the ban on tourism in South Korea under military rule, which ended with political liberalization in the 1980s. In addition, state-owned banks did not provide loans for consumers and importers of foreign luxury goods, such as cars, washing machines, and video cameras (Shin, 1998: 8). The tax system can also be designed to discourage consumption and encourage saving. Wade argues that the Taiwanese government did exactly this by trying to 'harness the tax system for savings and investment objectives as well as revenue ones' (1990: 175). Several incentives for private savings were provided, and selective, indirect taxes on luxury goods and amusement services were pursued. Indirect taxes, including customs duties, accounted for about 70% of total tax revenues in the late 1970s (Wade, 1990: 60).

## Argument II: Dictatorship and state autonomy

The alleged superior economic performances of Asian dictatorships have often been attributed to the dictatorial state's autonomy (Przeworski and Limongi, 1993: 56). Autonomous states can 'achieve relative independence (or insulation) from the demanding clamour of special interests (whether class, regional, or sectoral, where they exist) and ... can and does override these interests in the putative national interest' (Leftwich, 2000: 168). Leftwich describes the South Korean, Taiwanese, and Singaporean states as 'strong and relatively autonomous' (2000: 99). These states have resisted political pressures from consumers, particular businesses and organized labor, and have thus been able to carry out policies beneficial to industrial growth in particular, and economic growth in general. Democratic polities on the other hand are argued to be prone to capture from special interest groups (Olson, 1982). Lobbying directed towards politicians by interest groups will also generate wasteful rent seeking, which detracts resources and focus from more productive ventures. It is argued that authoritarian politicians are insulated from such pressures, which enables them to conduct policies that take into account the overall national welfare, including economic growth.

Wade (1990: 294–296) evaluates the Taiwanese economic bureaucracy, with its power delegated from the political rulers, as well protected from interest group pressures. In the three most authoritative industrial policy-making bodies, there was hardly any representation of business interests until the early 1980s. Moreover, when the government and bureaucracy cooperated with particular business interests, it was on the terms of the government rather than business (Wade, 1990: 276–280). According to Wade, the weakness of the legislatures in Taiwan, South Korea, and Japan limited interest group influence on economic policy: a relatively low degree of democratic control over government, the argument goes, enhances bureaucratic autonomy. Bureaucrats can thereby focus on implementing growth-enhancing policies without disturbances.

A related argument deals with the quality of decision makers under democracy and dictatorship. An 'enlightened ruler' supported by a well educated and impartial technocratic-bureaucratic elite is more likely to understand the policies needed for long-term economic growth than a short-sighted populace or the man it ultimately elects to office. If the majority is unknowledgeable, or easily led by demagogy, the argument goes, it is better for enlightened autocratic elites to dictate policy. The argument does not however explain how one can ensure that enlightened rulers occupy office in dictatorships, and it assumes that rulers are not only enlightened but also have incentives to enact the proper policies.

## Argument III: Dictatorship and reform

Another argument for why dictatorships are better at generating economic growth than democracies is that democratic systems are bad at legislating and implementing efficiency-enhancing economic reforms. Democracies are 'conservative systems of power' (Leftwich, 2000: 171). In order to push through economic reforms, the argument goes, strong leadership is needed and political quarreling should be avoided. Dictatorships have a wider range of instruments and a broader menu of alternative actions when it comes to introducing reforms. The careful and cumbersome democratic process with its institutionalized dialogue, checks, and balances, and the representation of different interests, makes rapid reform difficult. This is especially the case if some of the represented interests are outright opposed to economic reform. Under democracy, the required support for implementing a reform might be far higher than a majority of the population (Pierson, 1998: 553–558). Reform opponents might be 'veto players' (Tsebelis, 2002) in the reform process. A dictator is assumed to have the means, and in some instances also the incentives, to carry out painful reform. Reform can probably also be conducted with greater speed under dictatorship, since procedural steps needed under democracy and time-consuming negotiations can often be passed over.

Two efficiency-enhancing economic reforms in Asia were the land reforms conducted in South Korea and Taiwan after WWII, which distributed land from previous landlords to tilling farmers. This not only contributed to reducing rural inequality; there are also good theoretical arguments for why such redistribution increased economic efficiency (Banerjee and Duflo, 2005). Leftwich (2000: 6–7) argues that democratic governments would have had problems in carrying out such rapid and widespread land reform; the nature of the regime in these countries may therefore have spurred rural development.

Dictatorships may also have longer time horizons than democratically elected governments, since dictators generally stay in power longer than democratic leaders (Bueno de Mesquita *et al.*, 2003). Democratic politicians facing re-election might have weak incentives to promote reforms. Economic reforms are often initially painful, and the gains to structural economic reform might also lead to reform reversals as electoral fortunes change. Anticipated reform reversals can have detrimental economic effects, reducing investment (Rodrik, 1991).

## Why the Lee thesis might be wrong

Although argument I implied that dictatorship increases investment, there are some countering factors. In an open economy, there is no necessary relationship between savings and investment because of FDI, although the empirical correlation has been high (Feldstein and Horioka, 1980). However, this correlation may have weakened in recent decades, as FDI has increased dramatically. Empirical studies find a positive effect of democracy on property rights protection (Leblang, 1996; Boix, 2003; Knutsen, 2010) and the control of corruption, at least in consolidated democracies (Rock, 2009a). Several studies show that FDI is negatively affected by expropriation and corruption (see e.g. Blonigen, 2005). Thus, even if dictatorships force their citizens to save more, better investment climates in democracies might mitigate the dictatorial investment advantage through attracting FDI.

Argument II on dictatorship, state autonomy, and economic growth, can be disputed on several points. Even if dictatorial regimes are autonomous from the general population, autonomous dictators do not necessarily have an *interest* in pursuing growth-enhancing policies, which include the economic reforms discussed in argument III. Such an interest can stem from dictators being altruistic or from dictators' self-interest being served by economic growth. Wintrobe (1998) notes that history has seen few, if any, altruistic dictators. The second assumption is perhaps more often valid, for example, when a dictator's legitimacy and probability of survival depends positively on growth. Nevertheless, several studies show how dictators' self-interest is often enhanced by violating property rights and under-providing public goods (see e.g. Bueno de Mesquita et al., 2003; Acemoglu and Robinson, 2006a). Dictators might also have incentives to block efficiency-enhancing reforms, as discussed in argument III, that undermine their political position (Acemoglu and Robinson, 2006a). These policies are detrimental to economic growth, thereby casting serious doubt on the validity of arguments II and III. Another counterargument to II is that dictators are not always autonomous. Dictators also rely on important interest groups for securing their position in government. In practice, a dictator's survival might, for example, rely on pleasing a particular ethnic group, the military, or a group of rich influential businessmen or landowners, depending on the dictator's particular 'winning coalition' (see e.g. Bueno de Mesquita et al., 2003; Besley and Kudamatsu, 2007). Thus, although dictators may often act autonomously of the preferences of a majority of citizens, they often *cannot* act autonomously of their political backers. A third counterargument to II deals with the relationship between autonomy and economic growth. Evans (1995) convincingly argues that autonomy is not necessarily conducive to growth. The linkage between state and society that best promotes growth is a particular form of 'embedded autonomy' (Evans, 1995).

Additional arguments imply a 'democratic growth advantage' (see e.g. Przeworski and Limongi, 1993; Halperin *et al.*, 2005; Knutsen, 2011). Democracy is believed to protect property rights better (North, 1990; Knutsen, 2010) and to curb corruption (Rock, 2009a), which affect not only capital investment but also efficiency. Technological change is the most important factor for long-term economic growth (Romer, 1990). Dictatorship, through restricting civil liberties like freedom of speech, media and travel, reduces information flows into, and within a country. Democracies thus allow for more widespread diffusion of ideas and technologies, which enhances technological change (Halperin *et al.*, 2005; Knutsen, 2011). There is empirical evidence that democracy enhances total factor productivity (TFP) growth, a proxy for technological change-induced economic growth (Knutsen, 2011). Interestingly, Young (1995) shows that Singapore, South Korea, and Taiwan accumulated capital fast, but had unspectacular TFP-growth rates.

There is also evidence that democracy enhances human capital accumulation (e.g. Brown, 1999; Lake and Baum, 2001; Baum and Lake, 2003). Democratic politicians are more accountable to their citizenries than dictators, and health care and education are not only productivity-enhancing but also desired by most citizens. Thus, even if dictatorships invest more, democracies are better at generating two other ingredients of economic growth, human capital, and technological change.

#### Problems of inference and generalization

As seen above, there are problems with the arguments implying the economic superiority of dictatorship, and there are also arguments pointing to the economic superiority of democracy. However, the successful authoritarian governments in Taiwan, South Korea and Singapore have arguably mitigated the 'democracy advantage' in several areas. As Przeworski et al. (2000: 211) point out, together with Pinochet's Chile, these are the only recent experiences of authoritarian countries providing decent property rights protection. Singapore is by far the least corrupt non-democracy in the world according to Transparency International's surveys, and the societal 'embeddedness' of South Korean policy makers and bureaucrats (Evans, 1995) may have mitigated problems of information transmission that pervade other dictatorships. Singapore, South Korea, and Taiwan were thus among the world's fastest growing countries in the three decades after 1960. Thailand and Indonesia also enjoyed periods of decent economic growth under dictatorship. More recently, China has recorded a double-digit growth rate under a Communist one-party regime. Vietnam has also seen a booming export industry and a healthy economic growth rate over the last two decades. Therefore, one could argue, the case is made for the Lee thesis in the Asian context. Although dictatorship has created economically disastrous results elsewhere, is not the combination of Asian values and an Asian type of dictatorship a perfect recipe for economic growth? Even though there are many Asian authoritarian successstories, there are several problematic methodological aspects related to treating the cases above as conclusive evidence for the Lee thesis in Asia.

As Geddes (2003: 93–129) notes, the case-based literature on the suppression of labor rights and its economic effects provides a good example of case-selection on the dependent variable, and a resulting bias. Some countries, such as South Korea and Taiwan, have been systematically selected for study precisely because of their stellar economic performances. Results from these case studies have been erro-neously generalized. This point also applies to the qualitative research on Asian development performances in general. What if the development disasters are also softly authoritarian and employ export oriented economic policies? Most poor countries after WWII were relatively authoritarian, and even if the countries that caught up with the West were drawn purely by chance, we would have seen more dictatorial countries grow at rapid rates than democratic.

Thus, the case for the Lee thesis may have been made too quickly in the Asian development literature. First, democratic Japan experienced astonishing economic development after WWII. In more recent years, India has also experienced high growth. Second, South Korea and Taiwan continued to grow relatively fast after democratization. Although growth rates in these two countries are not as high as those of earlier years, it is more difficult for already rich countries to grow fast (Barro and Sala-i-Martin, 2004). Third, dictatorship has been the historical norm in Asia, without much economic success (perhaps with the exception of Meiji-Japan) before WWII. Fourth, there are several examples of Asian autocracies performing poorly over the last decades as well, such as North Korea and Myanmar. In the Philippines, the relatively democratic decade after Marcos' fall saw a 2.5 percentage point increase in the annual GDP per capita growth rate when compared to the previous decade according to Penn World Tables data. More attention has been paid to authoritarian economic successes in the Asian development literature than to the failures. If we want to make general inferences on the effect of dictatorship on growth in Asia, we need to take into account all available evidence, rather than generalizing from a few selected cases. Indeed, Rock (2009b) found no negative effect of democracy on economic growth in an Asian sample. This result is based on analysis of 12 cross section units with time series going from 1960 to 2004.

Some would claim that generalization or testing is not the purpose of idealtypical Asian developmental regime-models, and that such models simply yield a description of common traits of particular regimes in particular countries. However, the problem is whether or not we can *really assert* that autocracy has been empirically important for growth, even in, for example, South Korea. With few cases and many variables, we have a degree of freedom problem (King *et al.*, 1994). It is difficult to disentangle what actually influenced growth in the East Asian development miracles. As seen from the ideal-typical models above, several dimensions were identified as important for the development of East Asian economies. It is difficult to evaluate the relative importance of each of these. In order to avoid selection bias and the degree of freedom problem, we should assess the whole sample of Asian countries over a substantial time period.

#### Setting the record straight: the general impact of dictatorship on Asian economies

This study uses the most extensive data set possible for investigating the economic effects of democracy in Asia. Some analyses cover more than 1200 country-year observations. Some countries have data from the 1860s to 2003, although most countries have far shorter time series. The sample covers 21 Asian countries outside the Middle East and the former Soviet Union.<sup>3</sup> Since colonies are not

<sup>&</sup>lt;sup>3</sup> The countries are: Afghanistan, Bangladesh, Burma/Myanmar, Cambodia, China, India, Indonesia, Japan, Laos, Malaysia, Mongolia, Nepal, North Korea, Pakistan, the Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Thailand, and Vietnam.

independent countries, colonial histories are left out. The data are mainly from the Polity IV project and Angus Maddison's (2006) data set. The first provides data on political regime type in terms of degree of democracy (Polity index), and duration of the regime in power. The second provides data on population, GDP per capita and economic growth. In addition, there are dummies for plurality religion, with data collected from different sources (Knutsen, 2007). The Polity index ranges from -10 to 10 (most democratic). The index is additive, and the components are competitiveness of executive recruitment, openness of executive recruitment, constraints on the chief executive, competitiveness of political participation, and regulation of political participation (Marshall and Jaggers, 2005: 12-15). So-called interregnum-periods, mainly periods of anarchy or civil war (Marshall and Jaggers, 2005: 17), as well as periods of 'foreign interruption' (mainly occupation), are left out of the analysis. GDP per capita data are PPPadjusted, and thus take into account local price levels. Maddison (2006, 2007) relies on several sources for estimating GDP, and the estimates are plagued by measurement errors, particularly in early years where less information is available. Nevertheless, these are the only available economic data that cover the years before WWII. The Maddison data allow us to incorporate extra historical information, for example, by expanding the Chinese and Japanese time series. In addition, the Maddison data include estimates for countries left out of other data sets, such as North Korea, which mitigates the selection bias related to the underrepresentation of dictatorships with bad economic records. Elsewhere (Knutsen, 2011), I have developed an interpolated sample, which constructed time series for GDP and population where there were gaps in the original Maddison data. The interpolations were only conducted if there were no significant changes in the degree of democracy over the time period in question, in order to avoid biases. In all models below, the independent variables are lagged with 2 years to reduce endogeneity problems.

## Economic growth

I use pooled cross-section time-series data with country-year as unit of analysis, in order to incorporate both information from intra-national variation over time and information from cross-country comparisons. I first run ordinary least squares (OLS) with panel corrected standard errors (PCSE), which takes into account that standard errors can be heterogeneous across panels, autocorrelated within panels (AR1), and contemporaneously correlated between panels. The regression models include several control variables. *Log of GDP per capita* is controlled for, since income level is believed to affect both the probability of being democratic and economic growth. *Log of population size* is also controlled for because of the same reasons. The model also includes the *log of the political regime's duration* to control for political stability. Dummies for *plurality religion* are entered to control for culture-specific effects. This is particularly relevant because of the 'Asian-values' argument, as such

Sample	Time controls	Polity coefficient	<i>t</i> -value	Observations
Small	1870-1914-46-73	-0.005	-0.16	1071
Small	Decades	-0.005	-0.17	1071
Interpolated	1870-1914-46-73	-0.002	-0.07	1215
Interpolated	Decades	-0.002	-0.05	1215

Table 1. Results from OLS with PCSE analyses

PCSE = panel corrected standard errors.

controls enable us to capture differences in effects of democracy *within* sets of culturally similar countries.<sup>4</sup> Dummies for *time periods* are also entered to control for time-specific effects. I use dummies for the time periods 1870–1913, 1914–45, and 1946–72 in some models, and decade-dummies in others, with the 1990s-dummy being extended to 2003. The regression equation is thus given by:

$$GR_{i,t} = \beta_0 + \beta_1 \text{polity}_{i,t-2} + \beta_2 \ln(\text{regime duration} + 1)_{i,t-2} + \beta_3 \ln(\text{GDP/cap})_{i,t-2} + \beta_4 \ln(\text{population})_{i,t-2} + \Sigma \beta_i \text{religion}_i + \Sigma \beta_k \text{time}$$

The empirical results from the OLS with PCSE analyses do not support the Lee thesis. The estimated effect of democracy on economic growth in Asia is almost zero. The models predict less than or about 0.1 percentage point extra annual GDP per capita growth when going from a 'perfect' democracy (+10) to a harsh dictatorship (-10). As seen in Table 1, the *t*-values are also almost zero, and we cannot reject the hypothesis of no effect of democracy on growth in Asia when analyzing the full sample of 21 countries, with some time series going back to the mid-nineteenth century.<sup>5</sup> China after 1979 and Singapore under Lee might be used as partial evidence for the Lee thesis, but the Lee thesis as a more general claim does not hold, even if tested on a purely Asian sample. Although some Asian dictatorships have grown fast, other dictatorships, such as North Korea and pre-1979 China, have not. Moreover, although some democratic economies, such as post-Communist Mongolia, have grown slowly, others have grown at a decent pace.

The Asian economic miracles are a post-WWII phenomenon, and some would perhaps claim that the Lee thesis is constrained temporally. However, the results reported in Table 2 show that there are no large changes in the results when delimiting the sample to after WWII. The same is true for a sample using data only from after 1960. According to these analyses, there are no empirical reasons to believe that dictatorship in general improves economic growth rates in Asian countries. Although there is no support for the Lee thesis in Asia, there is no

<sup>&</sup>lt;sup>4</sup> Buddhism, Confucianism, and Shintoism are grouped together. For a closer description of these dummies, see Knutsen (2007).

 $<sup>^5</sup>$  I only provide reduced tables with Polity-coefficients. Full tables are provided at http://folk.uio.no/ carlhk/

Time period	Polity coefficient	<i>t</i> -value	Observations
Post-1945	-0.013	-0.44	984
Post-1960	-0.003	-0.11	801

Table 2. Results from OLS with PCSE analyses with decade dummies

PCSE = panel corrected standard errors.

Table 3. Results from fixed effects analyses (robust SE)

Sample	Time controls	Polity coefficient	<i>t</i> -value	Observations
Small	1870–1914–46–73	-0.023	-0.69	1071
Small	Decades	-0.012	-0.35	1071
Interpolated	1870–1914–46–73	-0.013	-0.39	1215
Interpolated	Decades	0.002	0.06	1215

significant positive effect of democracy on growth in Asia either. This stands in stark contrast to the positive effect of democracy on economic growth found in global samples (Knutsen, 2011). Thereby, the hypothesis that Asian dictatorships are better at generating economic growth than dictatorships elsewhere is not refuted by this empirical exercise. Asian dictatorships may still be considered developmental, *but* only when compared to the poor performances of dictatorships elsewhere.

What if there are country-specific factors, for example, cultural or geographical factors, which were not included in the analyses above that influence both regime type and economic growth? If so, the models above are incorrectly specified. By including dummy variables for every country in a Fixed Effects (FE) analysis, we control for country-specific effects. FE thereby only utilizes intra-national variation; that is, variation in the degree of democracy and economic growth within nations over time. FE estimators are therefore not affected by differences in growth rates between democratic India and authoritarian China or North Korea, but only by changes in growth rates between democratic and dictatorial periods in the histories of individual countries. In addition to country-specific effects, the models control for time dummies, log GDP, log population, and log regime duration.

I ran FE regressions with robust standard errors on the data samples with the longest time series. The results are strikingly similar to those obtained in the OLS with PCSE analyses: there is no significant effect of democracy on economic growth, even at the 10% level. All the absolute *t*-values in Table 3 are lower than 0.7. Even if we control for country-specific effects, and only use information based on changes in regime and growth patterns within a country's history, there is no support for the Lee thesis. We find no evidence that Asian countries have

Time period	Polity coefficient	<i>t</i> -value	Observations
Post-1945 Post-1960	-0.023 -0.044	-0.67 -1.13	984 801
Post-1960	-0.044	-1.15	801

Table 4. Results from fixed effects analyses (robust SE) with decade dummies

grown slower as democracies than as dictatorships. The models thus imply that democratization does not hurt economic growth. This reinforces the result from Rock, who finds 'no autocracy growth advantage even for the so-called developmental states of East Asia' (Rock, 2009b: 947).

In FE regressions on samples with shorter time series, reported in Table 4, the estimated effect of democracy on growth decreases. The post-1960 analyses indicate that the replacement of a very democratic (+10) with a very dictatorial (-10) regime will give 1 percentage point extra annual GDP per capita growth. However, the estimate is very uncertain, and the negative effect of democracy on growth is statistically insignificant, even at the 10% level. The same is true for the post-1945 analysis. We will investigate possible temporal changes in effects below.

Tests were also performed on a different sample, using GDP data from the World Development Indicators (WDI). This sample contained only 17 countries, excluding, for example, North Korea, with time series from 1975 to 2004. There was no significant effect of democracy on economic growth in this sample either when running OLS with PCSE or FE, with decade dummies as time controls. OLS with PCSE models showed a negative estimated effect of democracy, with a t-value of -1.2. FE models, however, showed a positive estimated effect of democracy, with a *t*-value of 1.0. I checked the robustness of the results by substituting the Polity index with the Freedom House Index (FHI) and the dichotomous regime measure (AREG) from Alvarez et al. (2004).<sup>6</sup> There was still no significant effect of democracy on growth, even at the 10% level, both when running OLS with PCSE and FE models. The sign of the estimated effect of democracy alternated between positive and negative in different models. Independently of whether we incorporate cross-national variation or not, and independently of whether we use a broad operationalization of democracy, including, for example, civil liberties (FHI), or a narrow operationalization, based on contestable elections only (AREG), there is no significant effect of democracy on growth. The first result presented therefore holds: there is no empirical evidence for the Lee thesis in Asia.

It might however be that rich Asian democracies like Japan, Taiwan, and South Korea drive these results, and that democracy reduces growth in poorer Asian countries.

<sup>&</sup>lt;sup>6</sup> The FHI is the average of Freedom House's Political Rights and Civil Liberties indexes (Freedom House, 2006). The dichotomous AREG-measure is based on the existence of free and contested elections (Przeworski *et al.*, 2000).

However, OLS with PCSE models that include an interaction term between polity and log GDP, show a negative significant (5% level) interaction term and a positive significant (5% level) Polity-coefficient, indicating that democracy increases growth in the poorer Asian countries, but not in the richer.<sup>7</sup> This result goes against the 'premature democracy is bad for growth' argument (Sirowy and Inkeles, 1990). Political accountability and checks and balances on those in power might be extra important in poor countries, in order to mitigate these countries' problems with poor protection of property rights, high corruption and the misallocation of scarce public funds to purposes other than basic public goods. These findings also have indirect implications for the 'optimal path' to stable democracy in the long run. Poor democracies are more likely to collapse than richer democracies (Przeworski et al., 2000). If dictatorships in poor developing countries had had higher growth rates than democracies, the optimal path could have been sticking with dictatorship until Lipset's (1959) requisites for stable democracy were established, and then transition. However, since poor Asian democracies grow at least equally as fast as poor dictatorships, there is no reason to postpone 'premature' democratization for democracy's sake.

The relationship between democracy and growth might have changed over time. Rodrik (1999b) argues that democracies mitigate the economic problems and improve the benefits of economic openness: they provide institutions that allow for bargaining and the compensation of losers in international trade, and provide more flexible policies in response to external economic shocks, such as the 1997 Asian financial crisis. As trade and capital flows have increased substantially over the last three decades, also in Asia, the effect of democracy on growth might thus have become more positive. This hypothesis can be tested with a Chow-test (Greene, 2003: 130–133). I run Chow-tests on the OLS with PCSE models to investigate whether the effect of regime type on economic growth is different before and after 1980. However, I find no significant change. The estimated effect of democracy was slightly positive before 1980 and slightly negative after 1980 in all models, although the difference is insignificant at the 10% level. The findings are qualitatively similar when I test for changes in effect from before and after 1990.

As seen above, there are arguments indicating that dictatorships enhance economic growth through increasing capital accumulation and increasing efficiency because of state autonomy and an ability to push through economic reforms. The lack of significant results could indicate the three arguments are not as relevant as their proponents believe, even in Asia. However, other arguments point to mechanisms through which democracy enhances growth, and the lack of an aggregate effect could result from several mechanisms cancelling each other out. We can assess the validity of argument I more directly through looking at how regime type affects investment.

 $<sup>^{7}</sup>$  The interaction models and later Chow-test models are structurally similar to those reported in Table 1.

#### Investment

One of the arguments backing the Lee thesis was that dictatorships are able to push up savings and investment rates. Although there is no effect of democracy on growth in Asia, there might be a negative effect of democracy on the share of GDP going to real capital investment. I used the same independent variables as above, including decade dummies, and ran OLS with PCSE models. The Maddison data set does not contain investment data, therefore I used WDI data on real investment as a share of GDP (INVSHARE), GDP per capita and population. The longest time series extends from 1975 to 2003 and 17 countries are included (424 observations). The effect of democracy on INVSHARE is negative and significant at the 5% level. Thus, there is reason to believe that dictatorships on average allocate a larger share of their GDP to investment. According to the estimate, a dictatorship (polity = -10) invests 2.2 percentage points more of its GDP on average than an otherwise equal democratic country (polity = 10). When we use the FHI instead of Polity, the negative effect of democracy on INVSHARE is only significant at the 10% level. The AREG measure, however, is insignificant at the 10% level. When we run FE analyses with INVSHARE as dependent variable, the Polity index still has an estimated negative coefficient, but is now insignificant at the 10% level. However, the FHI is now significantly negative at the 1% level. There is therefore at least some evidence for the hypothesis that democracy hampers investment in Asia, which indicates partial support for argument I.<sup>8</sup> Combined with the lack of significant effect on economic growth, this could imply that Asian democracies are better at generating human capital, or at promoting the efficient use of resources and technological change, than Asian dictatorships.

The relationship between dictatorship and investment may have changed over time due to the globalization of capital markets, as discussed above. If dictatorships are better at generating domestic savings, but democracies are better at attracting FDI, we would expect the effect of dictatorship on INVSHARE to have shrunk in recent decades. However, neither models using the Polity index, FHI, or AREG find a significant change in the effect of regime type on investment before or after 1980 when applying Chow-tests.

### Human capital

Although dictatorship increases investment in Asia, there was no detectable effect of dictatorship on economic growth. It might be that democracies allocate their investments more efficiently. There may also be other reasons. As seen above, one general assertion is that democracies accumulate more human capital by providing well functioning education systems for their populations (Brown, 1999; Lake and Baum, 2001; Baum and Lake, 2003). Moreover, studies of other

<sup>&</sup>lt;sup>8</sup> This result contrasts with Rock's (2009b) result, which indicates a possible democracy advantage when it comes to physical capital investment.

regions, such as Africa (Stasavage, 2005), have shown that democracy improves education policies. I test whether democracy had a positive average effect on gross school enrollment ratios, using data from the WDI. For primary schooling, there are data for 17 countries, but the short time series yield only 120 observations. I ran OLS with PCSE models with the same independent variables as above. The result is somewhat surprising, as democracy, as operationalized by Polity, FHI, and AREG, has a negative significant (5% level) effect on primary school enrollment in Asia. Political economic models indicate that democratization expands education to larger parts of the citizenry due to political pressures (Acemoglu and Robinson, 2006b). One explanation for this puzzling result might be that many Asian post-WWII dictatorships have been Communist. Communist regimes have historically scored high on primary school enrollment and literacy. In addition, Brown (1999: 686), drawing on arguments related to this paper's arguments II and III, proposes that when a dictator wants economic development and 'attempts to "build" a nation, authoritarian regimes are more efficient at mobilizing an entire society toward universal enrollment at the primary school level'.

However, democracies outperform dictatorships on secondary school enrollment. The estimated coefficients are large, and all democracy indicators are significantly positive, at least at the 1% level. The same result holds for tertiary school enrollment, with all democracy indicators being significantly positive at the 0.1% level. These analyses, although the data material is limited, indicate that while dictatorships in Asia were better than democracies at generating high primary school enrollment, they were far worse at generating high secondary and tertiary school enrollment. The latter results are in line with theoretical expectations. Secondary and tertiary school enrollment is probably extra important for productivity in knowledge-intensive economies focused on production in complex manufacturing and service sectors. As Asian countries aim to become 'knowledge economies' in the future, dictatorships may then perform worse than democracies. However, if Brown's (1999: 686) argument as presented above is valid, it *might* be that some dictatorships will manage to mobilize high levels of secondary and even tertiary enrollment as their economies develop further, should their leaders want to do so.

## Conclusion

Leftwich calls the belief that democracy is necessary for economic development an 'orthodoxy' that is not well-founded in classical political science literature or empirical evidence (2000: 129). He argues that if economic development, and particularly growth, is to emerge in many developing countries, 'it will be under the auspices of a political system that is a lot less pleasant than democracy' (15). Some scholars studying East- and Southeast Asian politics conclude that dictatorship is the best regime for promoting economic growth, and that democracy is a luxury good for rich countries (Sen, 1999: 15). This is the Lee thesis. This paper

reviewed two proposed reasons for why dictatorship is more conducive to economic growth in Asia than elsewhere: Asian values and Asian developmental dictatorships. However, there are flaws in the Asian values argument, and it is unclear whether the developmental characteristics of Asian regimes are connected to their dictatorial nature. The paper then sketched three general arguments that indicate the economic superiority of dictatorship: dictatorships invest more, are more autonomous from social groups, and can conduct economic reforms more easily. Although the arguments seem reasonable, there are strong counterarguments. Moreover, there are other factors indicating the economic benefits of democracy.

The South Korean, Taiwanese, Singaporean, and recent Chinese experiences provide convincing anecdotal evidence for the Lee thesis. However, in order 'to assess the impacts of political regimes, we must examine their full record, not just the best performers' (Przeworski *et al.*, 2000: 4). The statistical analyses in this paper provide no evidence for the Lee thesis, even in Asia. Panel data models using data from up to 21 Asian countries found no significant effect of dictatorship on economic growth, regardless of the time period investigated. However, as the theoretical discussion predicted, dictatorships invest a larger fraction of their GDP. Somewhat surprisingly, dictatorships also have higher primary school enrollment. Dictatorships are however worse when it comes to generating secondary and tertiary school enrollment.

Nevertheless, Asian dictatorships perform better than dictatorships globally when it comes to the statistical relationship with economic growth. Globally, dictatorship is associated with lower growth rates (Knutsen, 2011). However, even in Asia 'there is not a single reason to sacrifice democracy at the altar of development' (Przeworski, 2004: 1). The Lee thesis is at best a proposition that bears relevance for a particular 'species' of dictatorship, and at worst it is flat out wrong. Future statistical research should look at the relationship between different *types* of dictatorships and economic growth.

This paper's findings have some interesting implications. First, the paper illustrates Geddes' (2003) methodical point: one should be cautious when generalizing from a few cases selected on the dependent variable. Second, Inglehart and Welzel (2006) find that Asians do not have such authoritarian values as some have suggested. This paper reinforces the criticism of the rosy picture of Asian authoritarianism, as its often postulated positive economic impact is questioned. Third, the paper has implications for policy makers working with democratization issues. One argument against promoting democratization in developing countries is that democracy is inappropriate in such contexts, because of negative effects on political stability and economic outcomes. Some policy makers, journalists, and academics still consider dictatorship a useful instrument for bringing economic development to poor countries. The post-1979 Chinese miracle is used as anecdotal evidence for the economic superiority of dictatorship today in the same way that South Korea and Taiwan were used a couple of decades ago. This paper indicates that the proposed economic benefit of dictatorship, even in Asia, is highly exaggerated. Conversely, democracy's effects on economic development in poor countries is underrated. Policy makers and others can promote democracy in developing countries without a guilty conscience about the economic consequences.

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## References

- Acemoglu, D. and J.A. Robinson (2006a), 'Economic backwardness in political perspective', American Political Science Review 100(1): 115–131.
- (2006b), *Economic Origins of Dictatorship and Democracy*, New York: Cambridge University Press.
- Alvarez, M.E., J.A. Cheibub, F. Limongi and A. Przeworski (2004), ACLP Data Set. Updated Version.
- Banerjee, A.V. and E. Duflo (2005), 'Growth theory through the lens of development economics', in P. Aghion and S.N. Durlauf (eds), *Handbook of Economic Growth Volume 1*, North Holland: Elsevier, pp. 473–552.
- Barro, R.J. (1997), *Determinants of Economic Growth. A Cross-Country Empirical Study*, Cambridge, MA: The MIT Press.
- Barro, R.J. and X. Sala-i-Martin (2004), Economic Growth, Cambridge, MA: MIT-Press.
- Baum, M.A. and D.A. Lake (2003), 'The political economy of growth: democracy and human capital', *American Journal of Political Science* 47(2): 333–347.
- Beetham, D. (1999), Democracy and Human Rights, Cambridge: Polity Press.
- Besley, T. and M. Kudamatsu (2007), 'Making Autocracy Work'. Working Paper.
- Blonigen, B.A. (2005), 'A review of the empirical literature on FDI determinants', Atlantic Economic Journal 33(4): 383–403.
- Boix, C. (2003), Democracy and Redistribution, New York: Cambridge University Press.
- Brown, D.S. (1999), 'Reading, writing and regime type: democracy's impact on primary school enrollment', *Political Research Quarterly* 52(4): 681–707.
- Bueno de Mesquita, B., A. Smith, R.M. Siverson and J.D. Morrow (2003), *The Logic of Political Survival*, Cambridge, MA: MIT Press.
- Burkhart, R.E. and M.S. Lewis-Beck (1994), 'Comparative democracy: the economic development thesis', *American Political Science Review* 88(4): 903–910.
- Chang, H.J. (2006), The East Asian Development Experience The Miracle, the Crisis and the Future, London: Zed Books.
- Cho, H.M. and E.M. Kim (1998), 'State autonomy and its social conditions for economic development in South Korea and Taiwan', in E.M. Kim (ed.), *The Four Asian Tigers Economic Development and the Global Political Economy*, San Diego: Academic Press, pp. 125–158.
- Deyo, F.C. (1998), Industrial flexibility, economic restructuring and East Asian labor, in E.M. Kim (ed.), The Four Asian Tigers – Economic Development and the Global Political Economy, San Diego: Academic Press, pp. 184–207.
- Evans, P. (1995), Embedded Autonomy. States & Industrial Transformation, Princeton: Princeton University Press.

- Feldstein, M. and C. Horioka (1980), 'Domestic saving and international capital flows', *Economic Journal* 90: 314-329.
- Feng, Y. (1997), 'Democracy, political stability and economic growth', *British Journal of Political Science* 27(3): 391–418.
- Freedom House. (2006), Freedom in the World The Annual Survey of Political Rights and Civil Liberties, Lanham: Rowman & Littlefield.
- Geddes, B. (2003), Paradigms and Sand Castles Theory Building and Research Design in Comparative Politics, Ann Arbor: The University of Michigan Press.
- Gilpin, R. (2001), *Political Economy Understanding the International Economic Order*, Princeton: Princeton University Press.

Greene, W.H. (2003), Econometric Analysis, 5th edn., Upper Saddle River: Prentice Hall.

- Hadenius, A. and J. Teorell (2006), 'Authoritarian Regimes: Stability, Change, and Pathways to Democracy, 1972–2003'. Lund University: Working Paper #331.
- Halperin, M.H., J.T. Siegle and M.M. Weinstein (2005), *The Democracy Advantage. How Democracies Promote Prosperity and Peace*, New York: Routledge.
- Helliwell, J.F. (1994), 'Empirical linkages between democracy and economic growth', *British Journal of Political Science* 24(2): 225–248.

Helpman, E. (2004), *The Mystery of Economic Growth*, Cambridge, MA: The Belknap Press of Harvard University Press.

- Inglehart, R. and C. Welzel (2006), Modernization, Cultural Change and Democracy The Human Development Sequence, Cambridge: Cambridge University Press.
- Johnson, C. (1982), MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925–1975, Stanford: Stanford University Press.
- Keynes, J.M. (1997), *The General Theory of Employment, Interest and Money*, New York: Prometheus Books.
- Kim, D.J. (1994), 'Is culture destiny?: The myth of Asia's anti-democratic values', *Foreign Affairs* 73(6): 189–194.
- King, G., R.O. Keohane and S. Verba (1994), *Designing Social Enquiry Scientific Inference in Qualitative Research*, Princeton: Princeton University Press.
- Knutsen, C.H. (2007), Democracy and Property Rights. Oslo: Department of Economics, University of Oslo. Master thesis.
- (2010), 'Democracy, dictatorship and the protection of property rights', *Journal of Development Studies* (forthcoming).
- (2011), The Economic Effects of Democracy and Dictatorship. Oslo: Department of Political Science, University of Oslo. Phd thesis (forthcoming).
- Lake, D.A. and M.A. Baum (2001), 'The invisible hand of democracy', Comparative Political Studies 34(6): 587-621.
- Leblang, D.A. (1996), 'Property rights, democracy and economic growth', *Political Research Quarterly* **49**(1): 5–26.
- ----- (1997), 'Political democracy and economic growth: pooled cross-sectional and times-series evidence', *British Journal of Political Science* 27(3): 453–466.
- Lee, H.J. (2003), 'Development, crisis and Asian values', East Asian Review 15(2): 27-42.
- Leftwich, A. (2000), *States of Development: On the Primacy of Politics in Development*, Cambridge: Polity Press.
- Linz, J.J. and A. Stepan (1996), Problems of Democratic Transition and Consolidation Southern Europe, South America and Post-Communist Europe, Baltimore: The Johns Hopkins University Press.
- Lipset, S.M. (1959), 'Some social requisites of democracy: economic development and political legitimacy', The American Political Science Review 53(1): 69–105.

Maddison, A. (2006), The World Economy, Paris: OECD Publishing.

----- (2007), Contours of the World Economy, 1-2030 AD, Oxford: Oxford University Press.

Mankiw, G.N., D. Romer and D.N. Weil (1992), 'A contribution to the empirics of economic growth', *Quarterly Journal of Economics* **107**(2): 407–437.

- Marshall, M.G. and K. Jaggers (2005), *Polity IV Project Dataset Users' Manual*, College Park: Program Center for International Development and Conflict Management, University of Maryland.
- North, D.C. (1990), Institutions, Institutional Change and Economic Performance, New York: Cambridge University Press.
- Olson, M. (1982), The Rise and Decline of Nations. Economic Growth, Stagflation and Social Rigidities, New Haven: Yale University Press.
- Pierson, P. (1998), 'Irresistible forces, immovable object: post-industrial welfare states confront permanent austerity', *Journal of European Public Policy* 5(4): 539-560.
- Przeworski, A. and F. Limongi (1993), 'Political regimes and economic growth', *The Journal of Economic Perspectives* 7(3): 51–69.
- Przeworski, A., M.E. Alvarez, J.A. Cheibub and F. Limongi (2000), Democracy and Development: Political Institutions and Well-being in the World, 1950–1990, New York: Cambridge University Press.
- Przeworski, A. (2004), Democracy and Economic Development. New York: Department of Politics, New York University. Paper.
- Ravich, S.F. (2000), *Marketization and Democracy: East Asian Experiences*, Cambridge: Cambridge University Press.
- Rock, M. (2009a), 'Corruption and democracy', The Journal of Development Studies 45(1): 55-75.
- ----- (2009b), 'Has democracy slowed growth in Asia?', World Development 37(5): 941-952.
- Rodrik, D. (1991), 'Policy uncertainty and private investment in developing countries', *Journal of Development Economics* 36(2): 229–242.
- ----- (1999a), 'Democracies pay higher wages', The Quarterly Journal of Economics 114(3): 707-738.
- (1999b), The New Global Economy and Developing Countries: Making Openness Work, Baltimore: The Johns Hopkins University Press.
- (2000), 'Institutions for High-Quality Growth: What They Are and How to Acquire Them'. Cambridge MA.: National Bureau of Economic Research. NBER Working Paper no 7540.
- Romer, P. (1990), 'Endogenous technological change', Journal of Political Economy 98(5): 71-102.
- Sen, A. (1999), Development as Freedom, New York: Anchor Books.
- Shin, K.Y. (1998), 'The political economy of economic growth in East Asia: South Korea and Taiwan', in E.M. Kim (ed.), The Four Asian Tigers – Economic Development and the Global Political Economy, San Diego: Academic Press, pp. 3–31.
- Sikorski, D. (1996), 'Effective government in Singapore: perspective of a concerned American', Asian Survey 36(8): 818–832.
- Sirowy, L. and A. Inkeles (1990), 'The effects of democracy on economic growth and inequality: a review', Studies in Comparative International Development 25(1): 126–157.
- Solow, R.M. (1956), 'A contribution to the theory of economic growth', *The Quarterly Journal of Economics* 70(1): 65–94.
- Stasavage, D. (2005), 'Democracy and education spending in Africa', American Journal of Political Science 49(2): 343–358.
- Tsebelis, G. (2002), Veto Players How Political Institutions Work, Princeton: Princeton University Press.
- Wade, R. (1990), Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization, Princeton: Princeton University Press.
- Wintrobe, R. (1998), The Political Economy of Dictatorship, Cambridge: Cambridge University Press.
- World Bank (1993), The East Asian Miracle. Economic Growth and Public Policy, New York: Oxford University Press.
- Young, A. (1995), 'The Tyranny of numbers: confronting the statistical realities of the East Asian growth experience', *Quarterly Journal of Economics* **110**(3): 641–680.