

Mother Earth: Ally or Adversary?

by Thorvaldur Gylfason*

Abstract

Economic growth requires capital. This article reviews the relationship between economic growth around the world and six different kinds of capital: (a) real capital, (b) human capital, (c) financial capital, (d) foreign capital, (e) social capital, and (f) natural capital. Economic theory and empirical evidence suggest that domestic and foreign investment, education, financial maturity, and reasonable equality in the distribution of income are all good for growth. However, recent theory and evidence also seem to suggest that natural capital – i.e., abundant natural resources – may crowd out or impair other types of capital and thus impede economic growth over long periods.

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All models of growth, after all, stress the necessity and power of capital.

David Landes (1998, p. 171)

The accumulation of capital is a crucial engine of economic growth around the world. The two main competing economic philosophies of the 20th century were both centered on capital: one was derived from a book called *Das Kapital*, the other was widely referred to as ‘capitalism’ – and still is. The traditional concept of capital, however, is too narrow to fully serve the purposes of the modern theory of economic growth. The concept of capital must be enlarged to comprise at least six different types of capital:

- 1) *real capital* in the traditional sense, i.e., machinery, equipment, and so on;
- 2) *human capital* which is embodied in the education, know-how, and training of the labor force, in addition to health care;
- 3) *financial capital* which serves as a lubricant of economic transactions, trade, and production;
- 4) *foreign capital* which differs from other real or financial capital – or human capital, for that matter! – solely by its origins abroad;
- 5) *social capital*, by which is meant the infrastructure and institutions of society in a broad sense: its culture, law, system of justice, rules and customs and so on; and finally
- 6) *natural capital*, in the form of vegetation, fishing banks, minerals, energy in the form of fossil fuels, thermal and hydroelectric power potential, and so forth.

There is a need, in other words, to distinguish between extensive economic growth that results from the accumulation of produced capital as time passes and intensive growth that results from more efficient utilization of existing capital. The build-up of human, financial, foreign, and social capital promotes intensive growth for given real capital. An abundance of natural capital, on the other hand, raises different concerns for reasons to be discussed below.

This article is intended to highlight the relationship between economic growth over long periods and the six different kinds of capital listed above, with special emphasis on natural capital. Figure 1 describes the ways in which the different types of capital dictate economic growth according to recent growth theory and the rapidly expanding empirical literature on the subject. The quantitative studies in question typically apply multiple regression analysis to cross-sectional data or panel data that reflect developments within countries as well as differences across countries. In Figure 1,

positive charges assigned to arrows indicate positive effects in the direction shown, and negative charges indicate negative effects.

1. Real capital

Let us begin with arrow 1 which refers to the by now fairly well documented effect of real capital formation on economic growth. Even so, as the example of the Soviet Union and its satellites makes clear, a large volume of investment provides no guarantee for rapid growth. In his time, Nikita Khrushchev justified the Soviet Union's gigantic investment and industrialization efforts by saying that enough quantity insures quality. He was wrong, as it turned out. To be conducive to rapid growth, investment must be of high quality. Herein lies one of the main advantages of a mixed market economy compared with central planning. A market-based system provides strong incentives to private firms to invest only in worthwhile – that is, profitable – projects. Central planning, by contrast, is conducive to politically motivated investments (“white elephants”) rather than profit-oriented ones, thus inviting waste on a grand scale and skimpy growth.

Figure 2 depicts the relationship between the annual rate of growth of gross national product (GNP) per capita from 1965 to 1998 and the average share of capital formation in gross domestic product (GDP) over the same period across 85 countries.¹ In order to adjust for the possibility that poor countries grow more rapidly than rich because they are catching up, the growth variable on the vertical axis has been purged of that part which is explained by the country's initial income per head.² The regression line drawn through the scatter of observations, one per country, indicates that an increase in the investment ratio by ten percentage points from country to country is associated with an increase in per capita growth by 2½ per cent per year. The correlation is also statistically significant; the Spearman rank correlation is 0.65. The data speak for themselves. Even if we do not adjust the volume of investment for quality, which is not easy to do in practice, we still see a clear pattern: by and large, investment is good for growth (but we still need to be on guard against white elephants).

¹ Figures 2-7 are all based on data taken from the World Bank's *World Development Indicators* 2001. The sample is described in detail in Gylfason and Zoega (2001).

² This was done by first regressing growth on the logarithm of initial income per head (i.e., in 1965) as well as on the share of natural capital in national wealth (more on this in Section 6) and then subtracting the initial income component from the observed growth rate.

In Figure 2, it is, of course, possible that the causation runs both ways. Rapid growth may encourage investment just as investment may spur growth. So, no conclusions are being drawn here as to cause and effect. Figure 2 is only intended to allow the data to speak for themselves in a way that accords with the results of multivariate regression analyses that can help account for more potential determinants of growth, and where the attempt was made to distinguish cause from effect. The same disclaimer applies to all the figures that follow. Even so, the study of bivariate cross-sectional relationships has many shortcomings. For one thing, such studies bypass the diversity of individual country experiences. For another, they do not account for economic developments over time, as panel studies are designed to do.

2. Human capital

Arrow 2 in Figure 1 describes the positive effect of education on economic growth. This effect stems from two main sources. Education improves the labor force and thus enables workers to use existing capital more efficiently. This is good for growth. Further, more and better education tends to speed up the rate of technological progress which spurs growth. On the other hand, increased human capital may well reduce the need for further accumulation of real capital. Economic growth then becomes more intensive and less extensive. Declining rates of investment and increased education in the industrial countries since the 1960s bear witness to this process. Human capital crowds out real capital.

Again, we must distinguish quantity from quality. The problem is that all the available and commonly used measures of education – school enrolment, years of schooling, expenditure on education – reflect education inputs rather than outputs, quantity rather than quality. Yet, there is strong evidence that increased education is associated with more rapid growth across countries, as shown in Figure 3 which covers the same 85 countries as before. The regression line drawn through the scatterplot indicates that an increase in the secondary-school enrolment rate by 25-30 percentage points from one country to another goes along with an increase in per capita growth by 1 per cent per year. For comparison, the average per capita growth rate for the 85 countries in the sample in the period under review was between 1 and 1½ per cent per year. The correlation is statistically as well as economically significant: the Spearman rank correlation is 0.72. Notice also that the curve shown

fits the data slightly better than a straight line because there are diminishing returns to education: increased education makes the greatest difference for growth when the standard of education is low to start with.

A similar pattern of education and growth across countries emerges when the flow of human capital formation is measured by public expenditure on education rather than focusing on the stock of human capital as measured by school enrolment as in Figure 3. As far as economic growth is concerned, however, the supply of education may matter less than demand. This is relevant here because public expenditure on education tends to be supply-determined and of mediocre quality, and may thus fail to foster efficiency, equality and growth, in contrast to private expenditure on education, which is generally demand-led and thus, perhaps, likely to be of a higher quality and more conducive to growth.

3. Financial capital

Arrow 3 in Figure 1 describes the contribution of financial capital to economic growth. The extent of liquidity represented by the ratio of money, broadly defined, to GDP reflects the financial maturity of a country, or financial depth: the more mature a country's financial markets – that is, the better the markets can serve their core function of channeling household saving into high-quality investment – the higher will be the rate of economic growth, other things being the same. Without enough money to grease the wheels of production, the economic system begins to stall like engine without oil. Herein lies the importance of money as a medium of exchange.

This key role of money helps explain why high inflation hinders financial development and economic growth as well. Consider a farmer: she needs cash in order to be able to keep her tractors running, to buy fuel, to replace spare parts that wear out, and so on. Thus, cash can be viewed as an input into production; this is sometimes called “working capital.” If high inflation makes it too expensive for the farmer to hold cash, it also increases the number of broken tractors, and thereby disrupts production. High inflation makes real capital crowd out financial capital. The result, as a rule, is impaired efficiency and slow growth.

Recent empirical evidence indicates that high inflation hurts economic growth through a number of channels, including financial depth. It is worth emphasizing that this is a recent discovery. After all, not long ago only technological progress was

considered capable of influencing long-run growth (Solow, 1970). Further, inflation was widely regarded as being solely a monetary phenomenon, so that the possibility that inflation could have something to do with real growth was by many considered remote. The crux of the matter is, however, that inflation is a relative price – the price of money and other nominal assets in terms of real assets – and it is, therefore, fully capable of having real effects. In particular, high inflation punishes people and firms for holding cash, and thus deprives the economy of essential lubrication.

Figure 4 shows the relationship between per capita economic growth and the ratio of money and quasi-money and GDP from 1965 to 1998 in the same 85 countries as before. The figure shows that an increase in money and quasi-money relative to GDP by 20 percentage points from one country to another is associated with an increase in annual per capita growth by 1 percentage point. The Spearman rank correlation is 0.73 and significant. There is, however, no clear evidence of a two-dimensional correlation between inflation and growth around the world. The reason is that the relationship between inflation and growth is a complicated one, and involves several factors – among them, real interest rates, saving, and probably also political stability – other than financial maturity.

As before, the causation can run both ways. Slow growth may hinder financial development just as financial maturity may spur growth. Even so, the policy implication is clear: keeping inflation low and liquidity reasonably high is most likely to be good for growth.

4. Foreign capital

One of the oldest lessons of economics is the one about the gains from trade and investment. Economic specialization through trade enables nations to do what they do best, and leave the rest to others. This makes, or at least has the potential to make, every participating nation better off, provided the gains are distributed so as to compensate those nationals who lose from trade. True, this may be easier said than done, but when a nation becomes better off, it is, in principle at least, possible if not always practical to ensure that no one is left worse off than before. The chief challenge of globalization in the modern world is to put this fundamental principle into viable practice.

Arrow 4 in Figure 1 describes the effect of the influx of foreign capital on economic growth. What is the empirical evidence? Figure 5 shows the relationship between economic growth as measured before and the ratio of gross foreign direct investment (FDI, adjusted for country size³) to GDP (converted to international dollars using purchasing power parity rates) from 1975 to 1998 in the same 85 countries as before. The regression line drawn through the scatterplot indicates that an increase in the FDI ratio by 2 percentage points from place to place is associated with an increase in per capita growth by 1 per cent per year. The Spearman rank correlation is 0.62 and significant. A similar pattern emerges when openness is measured by the ratio of exports and imports of goods and services to GDP (adjusted for country size, not shown) rather than by the FDI ratio as in Figure 5. This stands to reason: openness is a matter of exporting and importing goods and services as well as financial capital. We saw before, in Figure 2, that investment is good for growth. Figure 5 indicates that this applies to foreign as well as domestic investment. Foreign investment is particularly good for growth because foreign capital is often accompanied by foreign expertise and ideas: fresh winds, in short.

5. Social capital

Arrow 5 in Figure 1 refers to the contribution of social capital to economic growth. Social capital can mean different things to different people (Woolcock, 1998). For our purposes, it is most useful to think of social capital in terms of those aspects of a country's political and social infrastructure that matter most for economic growth. For example, corruption in government and business, rampant rent seeking by pressure groups, and a lack of democracy all tend to distort the allocation of resources, impair efficiency, and reduce economic growth (Bardhan, 1997). Such activity can be viewed as corrosion of social capital. Similarly, a lack of social cohesion bred by excessive inequalities may create animosities and conflicts among social groups that impede economic efficiency and growth by corroding social capital. If so, too much inequality in the distribution of income is unlikely to be good for growth. But how much is too much?

³ The adjustment was made by first regressing the FDI/GDP ratio on the logarithm of the population and then subtracting the predicted ratio from the actual ratio to obtain a measure of openness to FDI. In practice, this adjustment makes little difference; similar results obtain when the actual FDI/GDP ratio is used instead of the adjusted ratio.

Figure 6 shows a scatterplot of the annual growth of GNP per capita from 1965 to 1998 measured as before and the inequality of income or consumption as measured by the Gini index for 75 countries. The Gini index stretches from about 25 in those countries, such as Denmark, Norway, and Sweden, where the distribution of income is most egalitarian, to 60 or more in countries such as Brazil, Nigeria, Sierra Leone, and South Africa where the distribution of income is least egalitarian. The regression line through the scatterplot suggests that an increase of about 12 points on the Gini scale from one country to the next is associated with a decrease in per capita growth by 1 per cent per year on average. The relationship is statistically significant; the Spearman rank correlation is -0.50. These results do not indicate that the most egalitarian countries, like the Nordic countries, may have gone too far in the direction of increased equality and that less ambitious redistribution through taxes and transfers would help them grow faster. True, there are certain – some would say pretty strong! – indications that the Nordic countries may have gone too far in the direction of increased equality, thereby blunting incentives to work, save, and invest in education, but Figure 6 is not one of them.

Social and human capital are closely related, but the relationship is not simple. Increased education may reduce society's tolerance of great disparities of income and wealth and thus spur growth through increased social as well as human capital. At the same time, excessive inequality may trigger demands for more and better education that increases growth. Inequality may actually strengthen education in poor countries where it is mostly the rich who can afford to go to school: more inequality then means a larger number of rich people and more schooling. By the same token, inequality may weaken education in rich countries where all but some of the poor can afford to go to school: more inequality there means a larger number of poor people and less schooling.

6. Natural capital

Arrow 6 with a negative charge may surprise you: it describes the direct effect of natural resource abundance on economic growth. It may, therefore, be worthwhile to devote a bit more space to this recently rediscovered determinant of growth than the ones reviewed above. Recent empirical research, initiated by Sachs and Warner (1995), has uncovered a strong and robust cross-country relationship between

economic growth and the abundance of, or dependence on, natural resources. At issue here is not so much natural resource abundance as such but rather the extent to which nations depend on their natural resources for their livelihood.

There are six main channels through which natural resource intensity seems to affect economic growth across countries. Let us discuss each in turn.

First, countries that are rich in natural resources experience booms and busts at regular intervals, not only due to commodity price fluctuations in world markets but also due to resource discoveries that typically create intermittent upswings in export earnings that cause the national currency to appreciate in real terms to the detriment of other export industries. This phenomenon is known as the “Dutch disease” because this is what happened in the Netherlands in the early 1960s following the discovery of large reserves of natural gas within Dutch jurisdiction in the North Sea. As it happens, the Dutch got over this ailment before long, so today the Dutch disease is a misnomer, but the name stuck. Nevertheless, many other countries suffer from the Dutch disease. Iceland is a case in point: Icelandic exports of goods and services have been stagnant relative to output since 1870 (this is not a misprint!), hovering around a third of GDP all this time. A reasonable interpretation of this must involve Iceland’s dependence on the export of fish, which has kept the real exchange rate of the national currency too high and too volatile for a long time, and thus stifled the growth of other – that is, nonfish – exports. Arrow 6 represents the Dutch disease.

Second, resource-rich countries tend to be marred by rent seeking on the part of producers who thus divert resources away from more socially fruitful economic activity (Auty, 2001). In particular, the combination of abundant natural resource rents, ill-defined property rights, imperfect or missing markets, and lax legal structures may have quite destructive consequences. In extreme cases, civil wars break out – such as Africa’s diamond wars – which not only divert factors of production from socially productive uses but also weaken or destroy societal institutions and the rule of law. In other, less extreme cases, the struggle for huge resource rents may lead to a concentration of economic and political power in the hands of elites that, once in power, use the rent to placate their political supporters and thus secure their hold on power, with stunted or weakened democracy and slow growth as a result. Rent seeking can also take other, more subtle forms. For example, governments may be tempted to thwart markets by granting favored enterprises or individuals privileged access to common-property natural resources, or they may offer

tariff protection or other favors to producers at public expense, creating competition for such favors among the rent seekers. Extensive rent seeking – that is, seeking to make money from market distortions – can breed corruption in business and government, thus distorting the allocation of resources and reducing both economic efficiency and social equity. Insofar as natural resource abundance involves public allocation of access to scarce common-property resources to private parties without payment, thereby essentially leaving the resource rent up for grabs, it is only to be expected that resource-rich countries may be more susceptible to corruption than others. Empirical evidence and economic theory suggest that import protection, which is often extended to foreign capital as well as goods and services, tends to impede economic efficiency and growth (recall Figure 5). Further, natural resource abundance may fill people with a false sense of security and lead governments to lose sight of the need for good and growth-friendly economic management, including free trade, bureaucratic efficiency, and institutional quality. Incentives to create wealth through good policies and institutions may wane because of the relatively effortless ability to extract wealth from the soil or the sea. Manna from heaven can thus be a mixed blessing. Furthermore, natural capital may crowd out social capital by increasing income inequality. The idea here is that natural resource rents tend to be less equally distributed than labor income among the population. Indeed, if this is not so at the time of the resource discovery, then the chief purpose of the ensuing rent-seeking activity is precisely to produce such an outcome. Some of the most resource-rich countries in the world are also among the least egalitarian. Arrow 7 describes the effects of natural resources on economic growth through rent seeking, corruption, and excessive inequality all of which tend to corrode social capital and reduce growth.

Third, natural capital may crowd out human capital as well as social capital by hurting education, as suggested by arrow 8. Specifically, natural resource abundance or intensity may reduce private and public incentives to accumulate human capital. Awash in cash, natural-resource-rich nations may be tempted to underestimate the long-run value of education. Of course, the rent stream from abundant natural resources may enable nations to give a high priority to education – as in Botswana, for instance, where government expenditure on education relative to national income is among the highest in the world. Even so, empirical evidence shows that, across countries, school enrolment at all levels is inversely related to natural resource abundance or intensity. There is also evidence that, across countries, public

expenditures on education relative to national income, expected years of schooling, and school enrolment are all inversely related to natural resource abundance (Gylfason, 2001). This matters because more and better education is good for growth.

Fourth, abundant natural resources may blunt private and public incentives to save and invest and thereby impede economic growth (arrow 9). Specifically, when the share of output that accrues to the owners of natural resources rises, the demand for capital falls, and this leads to lower real interest rates and less rapid growth (Gylfason and Zoega, 2001). In other words, natural capital may thus crowd out real capital as well as human and social capital. As in the case of education, it is not solely the volume of investment that counts because its quality – i.e., efficiency – is also of great importance. Unproductive investments – white elephants! – may seem unproblematic to governments or individuals who are flush with cash thanks to nature’s bounty. For example, most of the oil-rich OPEC countries have grown remarkably slowly since the 1960s despite a large volume of investment relative to GDP.

Fifth, when a large part of national wealth is stored in a natural resource, there may be less need for financial intermediation to conduct day-to-day transactions (arrow 10). Dissaving can take place through more rapid depletion of the resource and saving can take the place through less rapid depletion, or of more rapid renewal if the resources are renewable. In some countries, such as the OPEC states, saving also takes the form of foreign bank deposits. In this case, domestic financial intermediation becomes even less important. In contrast, when saving is piled up at home in the form of physical capital, domestic banks and financial markets assume paramount importance. By linking up domestic savers and investors, the domestic financial system contributes to a more efficient allocation of capital across sectors and firms. So, if an abundance of natural resources tends to hamper the development of the financial system and hence to distort the allocation of capital, economic growth may slow down due to a detrimental effect of financial backwardness on saving and investment (recall Figure 4). Hence, resource dependence tends to retard the development of financial institutions and hence discourage saving, investment, and economic growth. Put differently, natural capital can crowd out financial capital.

Sixth and last, arrow 11 in Figure 1 suggests that natural resource abundance may reduce openness by discouraging foreign capital inflows as well as exports. This point follows directly from the first two points above. The Dutch disease manifests itself through reduced incentives to produce nonprimary goods and services for export

which the overvalued currency of the resource abundant country renders uncompetitive at world market prices. Hence the reduction in trade. Rent seeking appears in many guises, including demands by domestic producers for protection against foreign competition, for example in the form of restrictions against foreign direct investment. Natural capital may thus crowd out foreign capital. This form of the Dutch disease – from natural resource riches to foreign capital controls – needs closer scrutiny in future empirical research. This matters because openness is good for growth (recall Figure 5).

Let us now look at the empirical evidence on natural resources and economic growth. Several measures of natural resource intensity can be used, some referring to the flow of services from natural capital while others refer to the underlying stock of such capital: (a) the share of primary exports in total exports of goods and services or GDP; (b) the share of primary production in employment or the labor force; and (c) the share of natural capital (i.e., oil reserves, mineral deposits, forests, agricultural land, etc.) in national wealth, defined as the sum of natural capital as described above, real capital accumulated through investment in machinery and equipment, and human capital built up through education and training. No attempt is made here to distinguish nonrenewable resources such as oil fields from nonrenewable ones such as fisheries or forests in view of the somewhat paradoxical, but apparently real, possibility that renewable resources may be almost as susceptible to depletion as nonrenewable resources. It is also possible to use the share of agriculture in GDP as a proxy for natural resource intensity. A small or at least declining share of agriculture in GDP is a sign of successful economic diversification, industrialization, and the development of services. Moreover, agriculture in developing countries is generally less high-skill labor intensive than industry and services. As a result, agriculture contributes less than other industries to growth through education. Here we use the share of natural capital in national wealth as a proxy for natural resource intensity; any one of the other three measures would produce similar results.

Figure 7 shows the relationship between average annual per capita growth from 1965 to 1998 as measured above and the share of natural capital in national wealth in the same 85 countries as before. A decrease in the natural capital share by 8 per cent of national wealth is associated with an increase in per capita growth by 1 per cent per year. The correlation is significant; the Spearman rank correlation is -0.64. This result accords with the linkages expressed through arrows 6-11 in Figure 1.

Notice the two clusters in the southeast corner and the northwest corner of Figure 7. The southeast corner is occupied by eight natural-resource-intensive, slow-growth African countries whose average investment ratio in the period under review was 14 per cent of GDP. In the northwest corner there are Botswana⁴ and seven other natural-resource-poor, high-growth countries in Asia whose average investment ratio was almost twice as high, or 27 per cent of GDP, in the same period. This pattern rhymes well with a linkage between natural resource abundance and growth through investment (arrow 9). Further, the first (African) cluster of countries sent 12 per cent of its adolescents to secondary school during 1965-1997 compared with 54 per cent for the second (Asian) cluster. This is consistent with a linkage between natural resource abundance and growth through education (arrow 8). Further still, the first cluster of countries attracted foreign direct investment equivalent to ½ per cent of GDP during 1975-1998 while the second cluster attracted three times as much foreign investment, equivalent to 1½ percent of GDP. This suggests a linkage between natural resource abundance and growth through openness (arrow 11). We can continue: with a Gini index of 54 on average, the first cluster of countries has a less equal distribution of income than the second cluster, where the Gini index is 37 on average. This accords with a linkage between natural resource abundance and growth through equality (arrow 7). At last, with broad money equivalent to 16 per cent of GDP on average from 1965 to 1998, the first (African) cluster of countries has less financial depth than the second (Asian) cluster, where the broad money/GDP ratio was almost three times as high, or 47 per cent on average over the same period. This is consistent with a linkage between natural resource abundance and growth through financial maturity (arrow 10).

7. Conclusion

The idea that natural wealth may be a mixed blessing is not new. In his *Wealth and Poverty of Nations*, David Landes tells the story of Spain following the colonization of South and Central America which made Spain rich in gold and other natural resources. These riches did not last, however, as Spain chose to waste a large part of its newfound natural wealth on luxuries and wars. In 1690, the Moroccan ambassador

⁴ Botswana's natural capital share is small in Figure 7 because the World Bank does not provide an estimate the country's diamond rent. The inclusion of Botswana in the sample does not materially influence any of the empirical results presented in this paper.

to Madrid wrote with discernible dismay of the Spaniards' apparent loss of interest in work, trade, and industry – in short, their 'learned helplessness' as modern psychologists might want to describe the phenomenon. Landes (1998, p. 173) summarizes his argument about Spain as follows: "Easy money is bad for you. It represents short-run gain that will be paid for in immediate distortions and later regrets."

This is by no means an inevitable outcome, however. According to Sir Arthur Lewis (1968, p. ix), "rapid economic growth is available to those countries with adequate natural resources which make the effort to achieve it." With the benefit of hindsight, Lewis's qualification concerning natural resources was perhaps unnecessary because human resources are almost surely more important for growth than natural resources. Even so, recent developments in growth theory and mounting empirical evidence indicate that Lewis was right. The key to understanding this is the realization that efficiency works like technology: like improved technology, increased efficiency is a means of producing more output from given inputs or, equivalently, of requiring fewer inputs to produce given output. And efficiency is a broader concept than technology, and more powerful. A country cannot be advised to invent – imitate perhaps, yes, but not invent – new technology in order to grow faster. But it can be encouraged to adopt policies that promote economic efficiency. So, whatever a nation does to become more efficient – through more and better investment and education, trade liberalization, privatization, stabilization, diversification, you name it – will also help it grow more rapidly for the benefit of all. And it needs to be on guard against the dangers that may accompany the gifts of nature. To grow or not to grow is in large measure a matter of choice.

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Figure 1. Capital and Growth

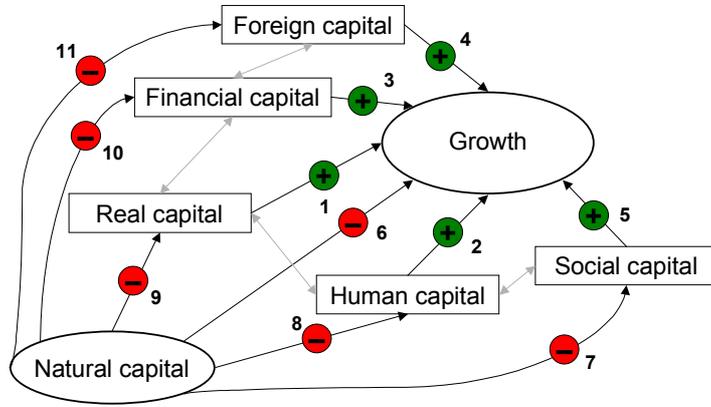


Figure 2. Real Capital and Growth

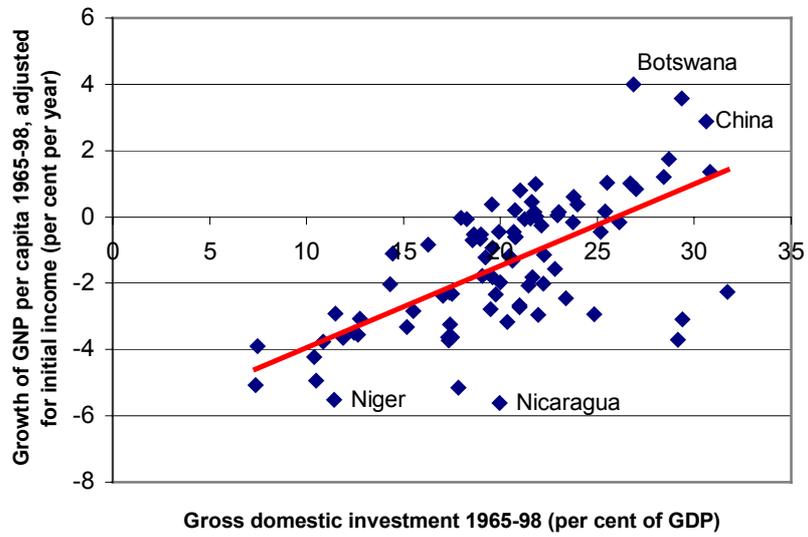


Figure 3. Human Capital and Growth

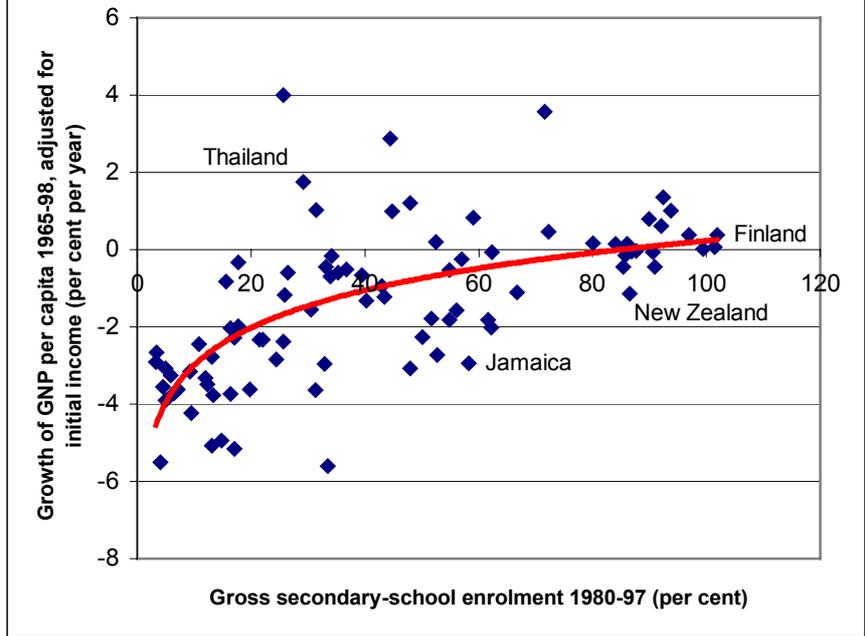


Figure 4. Financial Capital and Growth

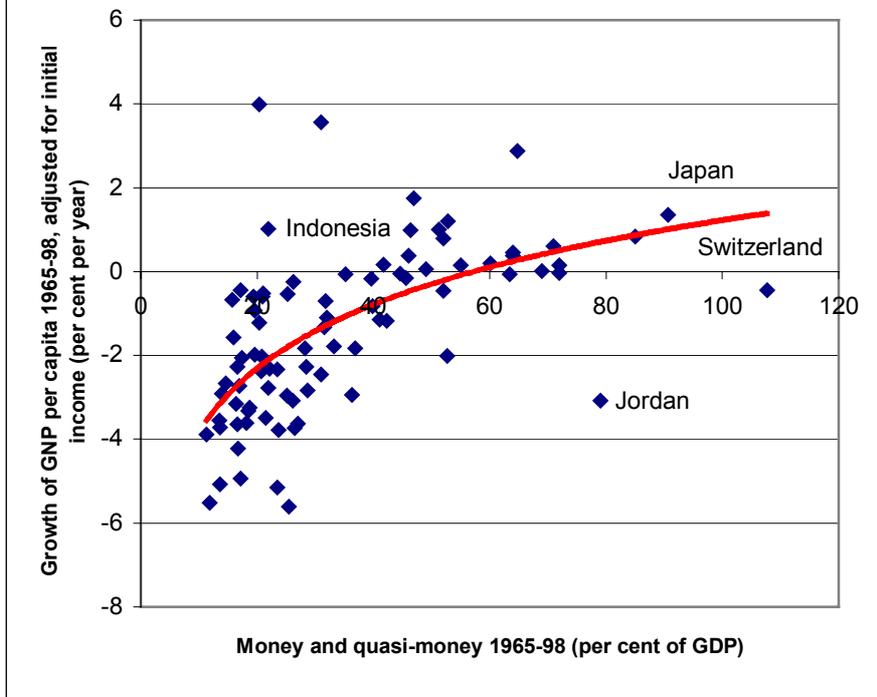


Figure 5. Foreign Capital and Growth

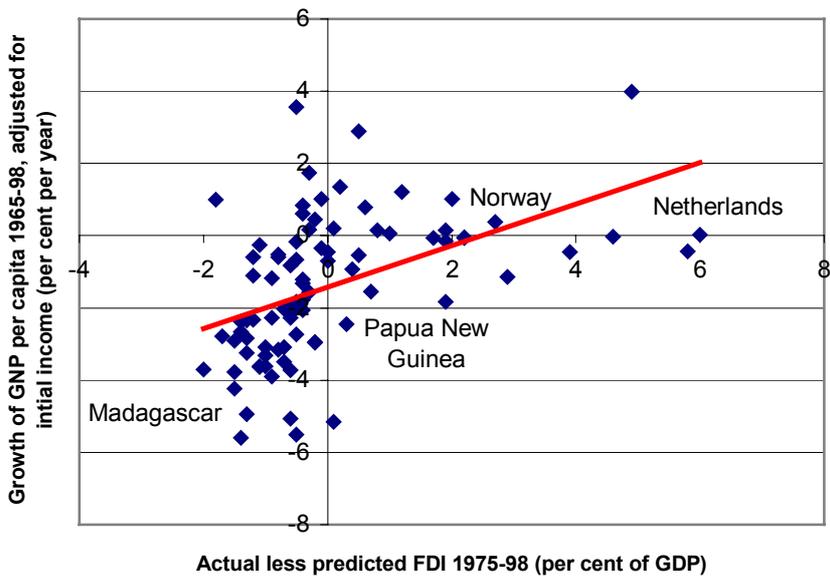


Figure 6. Social Capital and Growth

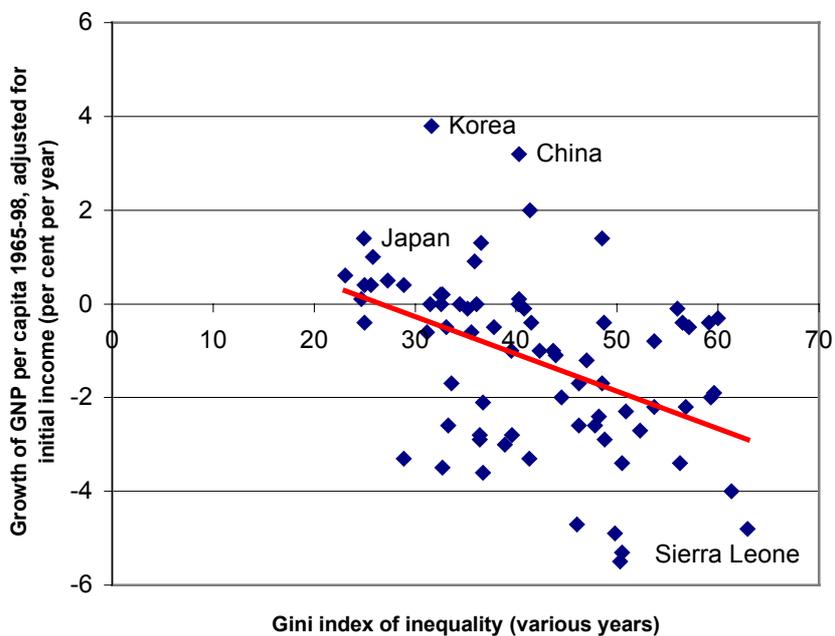


Figure 7. Natural Capital and Growth

