

EMERGING CAPITAL MARKETS

Lecture 9. Evaluating Country Economic Performance: Growth

Dr. Edilberto Segura

Partner & Chief Economist, SigmaBleyzer

Chairman, Advisory Board, The Bleyzer Foundation

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- A. Country Economic Analysis
- B. Explaining Long-Term Economic Growth
- C. Sustainable Economic Growth and Structural Adjustment
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 - D1. Economic Liberalization
 - D2. Institutional Development and Public Governance
- E. Assessing Country Economic Performance
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A. Country Economic Analysis

- The performance of the capital markets (stocks and bonds) of an EM is affected by the soundness/strength of its economy.
- Therefore, a successful investor in EMs must be able to analyze systematically the economic conditions of these countries.
- A sound economy is one that has both macroeconomic stability and sustainable economic growth.
 - **Macroeconomic Stability** is defined by stable prices with low inflation (internal stability), and a stable foreign exchange rate (external stability).
 - **Sustainable Economic Growth** is defined by a high rate of GDP growth that can be maintained over a long time.
- Solid macroeconomic stability and sustainable GDP growth are the two key factors affecting the performance of the stock exchange and bonds in an EM.

B. Explaining Long-term Economic Growth

1. The Harrod-Domar Model

The initial studies to explain economic growth gave emphasis to the level of **savings and investments** to achieve higher rates of economic growth (Harrod-Domar model). Capital was the king.

$Y = f(K)$ Aggregate Supply (Production, Y) is a function of capital “K”

Labor is abundant and the labor/capital proportions are fixed

$I = S = sY$ Investments “I” equal Savings “S” (“s”= savings rate)

$dY/dK = Y/K = p$ Marginal/average productivity of capital is **constant at “p”**

$dY = p \cdot dK$ Accelerator principle and no diminishing returns to capital

$dK = I - \delta K$ where δ is depreciation rate

$dY = p \cdot dK = p (I - \delta K) = p (sY - \delta K) = psY - p \delta K = psY - \delta Y$

$dY = Y (p \cdot s - \delta)$

GDP growth: $dY/Y = p \cdot s - \delta$ -- where p -- Y/K -- and δ are constant.

→ The rate of growth of GDP will depend only on the **savings rate** (i.e., capital accumulation). (eg.: $dY/Y = p \cdot s - \delta = 0.3 \times 0.3 - 0.05 = 0.04$).

- With stable **savings rate**, GDP growth will be constant and indefinite.
- To increase growth, an economy should **save (and invest)** more.

- However, further studies (ie, Solow's growth model) showed that investments alone will not be able to sustain growth beyond a critical point, because the returns to capital tend to decline as capital is increased.
- With diminishing returns to capital, there is a point in which new investments equal the level of dis-investments from capital depreciation.
- At this point additional income growth from investments cannot take place.
- Solow demonstrated that another factor, **technological change** (A), was the main driver determining long term growth and the pace of sustainable growth over the long term.
- Subsequent models (called endogenous growth models) established that technological change was in turn dependent on investments in Research and Development, and in Education (Human Capital).
- These activities have large externalities or spill-overs that can offset the drag from diminishing returns to capital.
- On these basis, economic growth can be sustained indefinitely.

2. The Solow Exogenous Growth Model

- Solow was bothered with (a) the neglect of employment in the H-D model; and (b) the lack of a stable growth path implied in this model:
 - Because capital and labor are used in equal proportions and their relative prices are fixed, the model **can not generate full employment**.
 - The model's accelerator principle implies that if investments were to result in output larger than actual demand, this will result in much lower investments in the following period, thus **magnifying economic fluctuations**. The model implies substantial economic instability.
- **In an extension of the Harrod-Domar model, Solow introduced explicitly Labor (L) and Technological change (E) to address these problems.**
- The growth factor "E" is also called "Factor Productivity Growth"
- Solow assumed **diminishing returns on Capital (keeping Labor constant)**.
- With diminishing returns on Capital, over the long run the contribution of Capital (per unit of labor) to income percapita diminishes over time and tends asymptotically to zero.
- Intuitively, therefore, we see that over the very long term, capital and savings do not contribute to a continuous growth in income percapita.
- Further growth in total income will need to come from increases in Labor or increases in Technological Change.

- Furthermore, even before this plateau is reached, the economy will reach a stable steady state (constant) level of capital percapita k^* (as depreciation increases offset increases in capital).
- This steady state level of capital leads to a stable, steady state growth of income percapita (y^*) at k^* .
- When this point is reached, the overall rate of total income growth will depend only to the growth of the labor force or growth in output per worker (due to technological change).

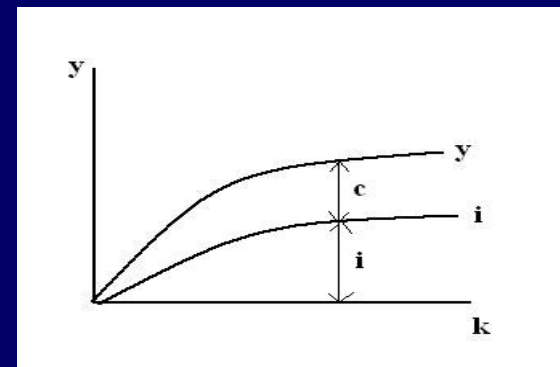
The Solow Model without Technological Progress

- **Five equations define the model:** (1) a production function; (2) an Aggregate Demand function; (3) a Consumption Function; (4) a Capital Accumulation function; and (5) Population growth “n”.

1. **Production Function:** Initially, let’s assume that output is only a function of capital and labor (ignoring technological change):

$$Y = F(K, L) \Rightarrow Y/L = F(K/L, 1) \Rightarrow \mathbf{y = f(k)}$$

- Where “**y**” is **income percapita (pc)** and “**k**” is **capital pc** (per unit of labor).
- Labor (population) grows at a rate “**n**”.
- The production function has diminishing marginal product of capital (mpc), i.e., capital has diminishing returns.



2. Aggregate Demand Percapita Function: $y = c + i$ (Closed economy)

3. Consumption Function: $c = (1 - s)y$ C is the difference Y minus S

Combining 2 & 3: $y = (1 - s)y + i \Rightarrow i = s y \Rightarrow i = s f(k)$

4. Capital Accumulation Function: $\Delta k = i - D = i - (\delta + n) k$

Capital pc (k) increases with investment pc (i), and decreases with dis-investment pc (D) coming from depreciation (δ) and population growth (n).

Inserting 3 into 4: $\Delta k = s f(k) - (\delta + n) k$;

when: $s f(k) = (\delta + n) k \Rightarrow$ then: $\Delta k = 0$;

That is, when investment pc equals dis-investment pc, capital pc is constant:

When $\Delta k = 0$, k becomes constant at k^* : $k^* / f(k^*) = s / (\delta + n)$

Where k is constant at k^* - called the steady state level of capital pc.

At k^* , income pc will also be at steady state y^* (changes in capital pc are not contributing to income pc growth; “total” income will growth only with increases in labor (“n” or population growth.)

Note that the higher the “s”, the higher the y^* : the savings rate is important to establish the steady state level of income pc, but not to sustain growth after this level is reached.

Solow Growth Model

Output, Inv., Disinvestment
per worker (y, i, D)

Dis-investment per
worker due to Depr &
Population growth =

$$D = (\delta + n)k$$

Output
 $y = f(k)$

y^*
(Steady
State)

$$\{i = s' f(k)\}$$

Investment
 $i = s f(k)$

$$D = i$$

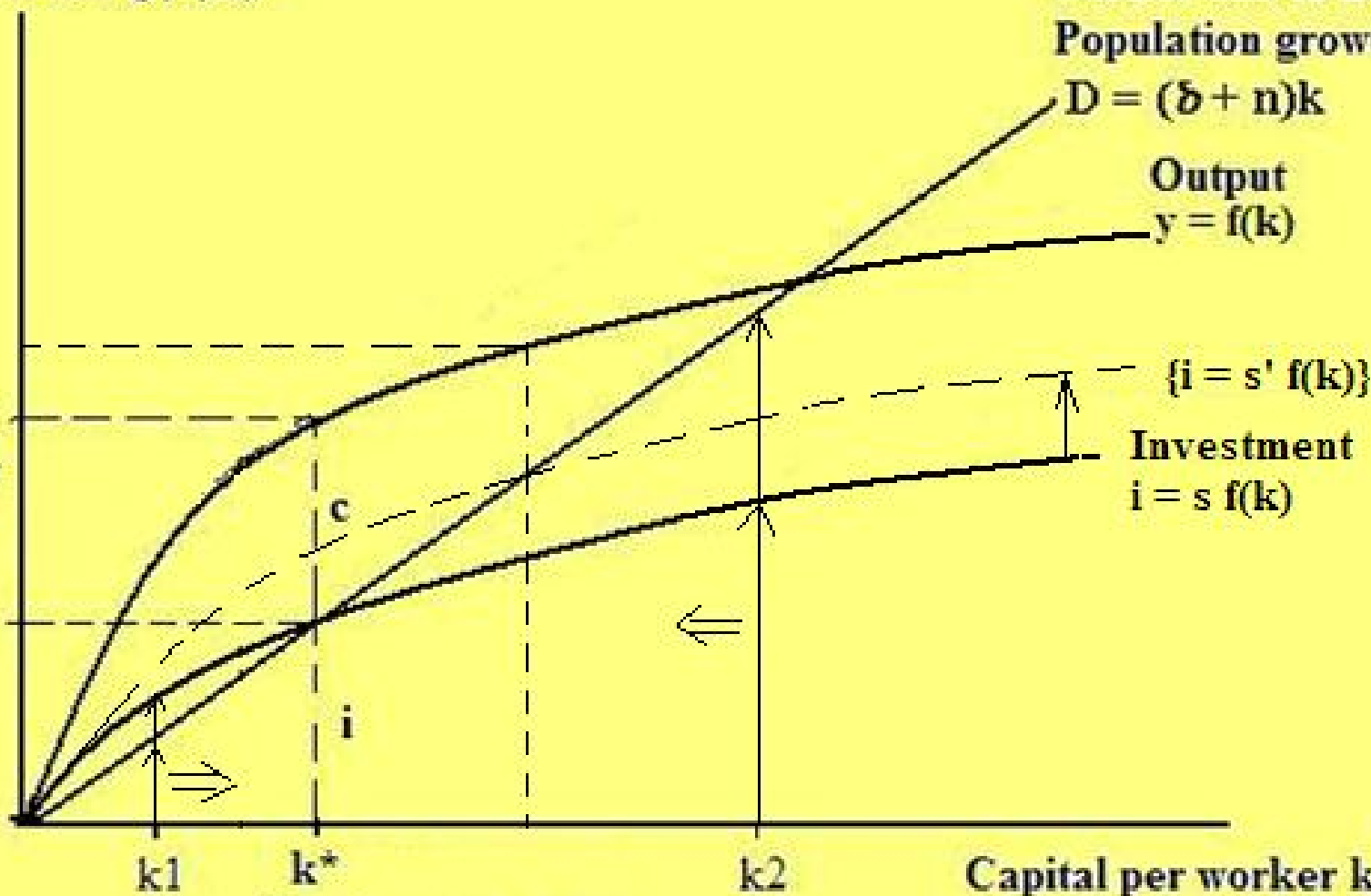
k_1

k^*

k_2

Capital per worker k

$D = i$
Steady
State k



- There is a single capital percapita stock k^* at which the amount of investment equals the amount of percapita dis-investment.
- When the economy ever finds itself at this level of the capital stock, the capital stock will not change because the two forces acting on it - investment and dis-investments- are just balanced.
- At k^* , $\Delta k = 0$, both the percapita capital stock and income percapita are steady over time (rather than growing or shrinking).
- Furthermore, the economy will always move towards this level.
- Using these few simplifying assumptions about the growth of the inputs, this model demonstrates the existence of a **stable growth** path for “**total**” output equal only to the growth of the labor force: e.g., if the population grows by 2%, the total output (GDP) grows by 2%.

Introducing Technological Progress in the Solow Model:

- But this prediction of a steady state constant level of income pc is at odds with the historical record, which shows sustained increases in income pc over very long periods. Total output, GDP, historically has grown more than population grow.

- To explain the growth of income pc, Solow introduced the idea of a residual production factor, which he called **technological progress**.
- **Technological progress** can be embodied in the production factors (total factor productivity: $Y = A k^\alpha L^{(1-\alpha)}$) or it could be embodied in the labor input (labor augmenting technological progress).
- In this case the production function becomes: $Y = K^\alpha \cdot (E \cdot L)^{(1-\alpha)}$ where E is a variable called the **efficiency of labor**.
 - The efficiency of labor reflects society’s knowledge about production methods: as the available technology improves, the efficiency of labor rises.
 - **The efficiency of labor also rises with improvements in the education, skills or health of the labor force.**
 - The term $(L \times E)$ measures the number of *effective workers*.
- With E growing at a rate “ g ”, then when $\Delta k = 0$ we obtain:

$$i = s f(k) = (\delta + n + g) k$$

- At steady state, capital per **effective** worker and output per **effective** worker are constant (with zero growth rates), but output per worker is growing at the rate “g”, and “total” output is growing at a rate of $(n + g)$.
- Without technological change, after steady state is reached, the growth of **total income** is limited to the growth of the labor force, meaning that percapita income (a crude measure of the standard of living) is constant through time.
- Technology allows both total income and income pc to growth.
- The model's assumption about decreasing returns on capital implies that per capita income does not grow without technological progress.
- **Therefore, technological change becomes the most important factor explaining sustainable long-term growth in income percapita, much more important than the accumulation of capital.**
- The savings and investment rate only explains the level at which this income percapita plateau will be reached.

- In other words, in the short term, the savings rate leads to capital accumulation and growth, but since capital has diminishing returns, over the long term the contribution of capital to growth disappear.
- Under this model countries can overcome a steady state stagnation of income percapita growth and continue growing only by **inventing or copying** new technology.
- This process by which countries continue growing despite diminishing returns is "**exogenous**" in the sense that it not determined within the model, but by outside factors, particularly the level of **Research and Development (R&D)**

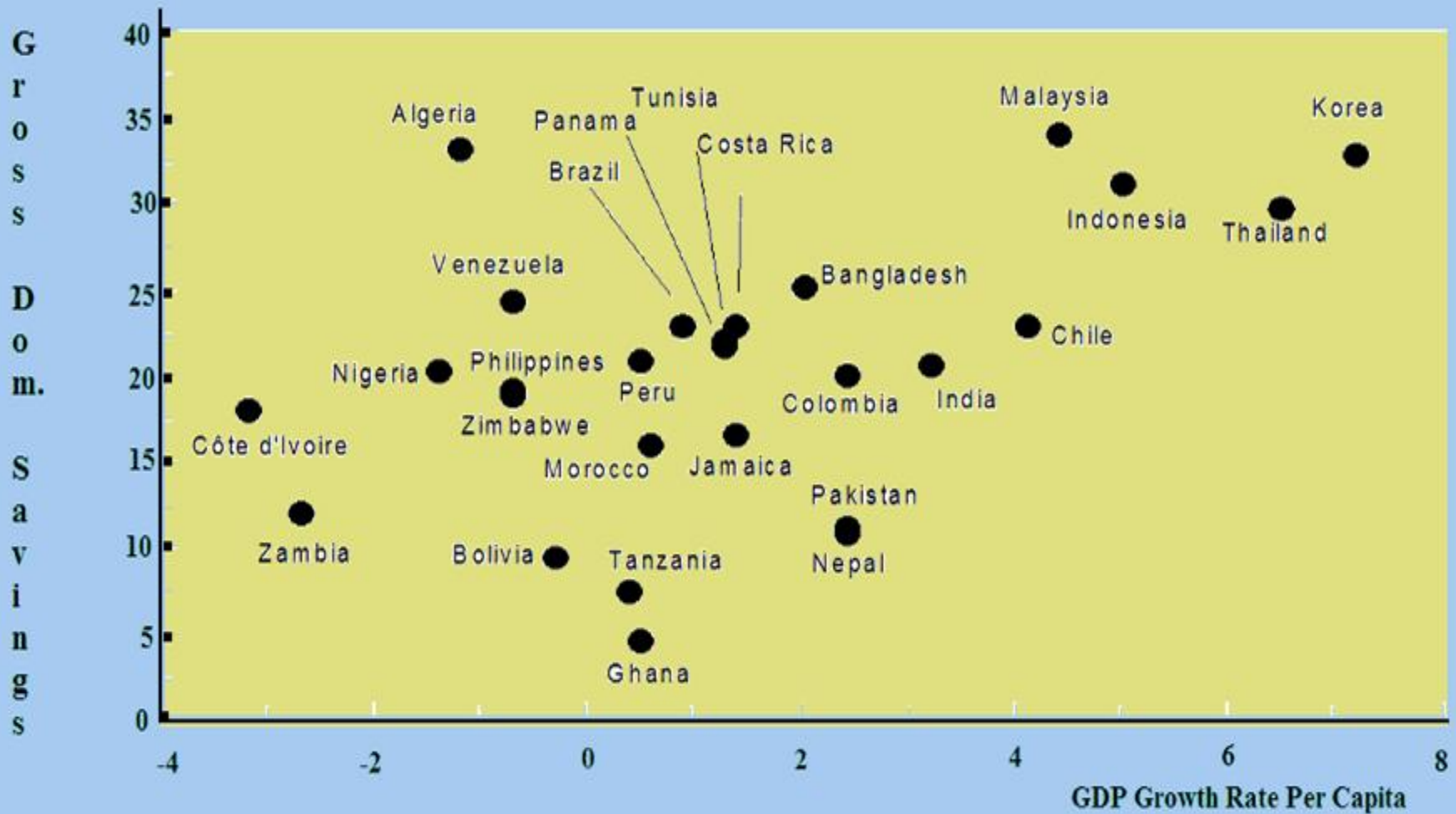
Empirical Evidence

- In the US, Total Factor Productivity (TFP) from technological change explains 20% - 40% of GDP growth (if GDP grew by 3% pa, 2% pa is due to increases in K & L and 1% due to TFP).
- In Europe, TFP growth lags US numbers by about 20%.

- In transition and developing countries, TFP depends on the adequacy of business environments: if they are favorable, TFP can be as high as 50% of total GDP growth; but with inadequate business environments, TFP is negligible (all growth would come just from additional investments or labor.)
- A study by Bosworth and Collins in 2003 showed that for 84 countries from 1960 to 2000, TFP accounted for a 41% share of GDP growth.
- In China TFP explains 50% of its economic growth since 1980.
- The USA invest about 2.5% of GDP in R&D. The EU is trying to catch-up but is behind with investments of 1.8% of GDP in R&D. China is moving fast and from negligible amounts, it now invest 1.5% of GDP in R&D and plans to reach 2.5% in five years. China has now become the second largest producer of scientific knowledge (after the US) as measured by the number of research publications. It has now more than 3 million scientists and engineers.

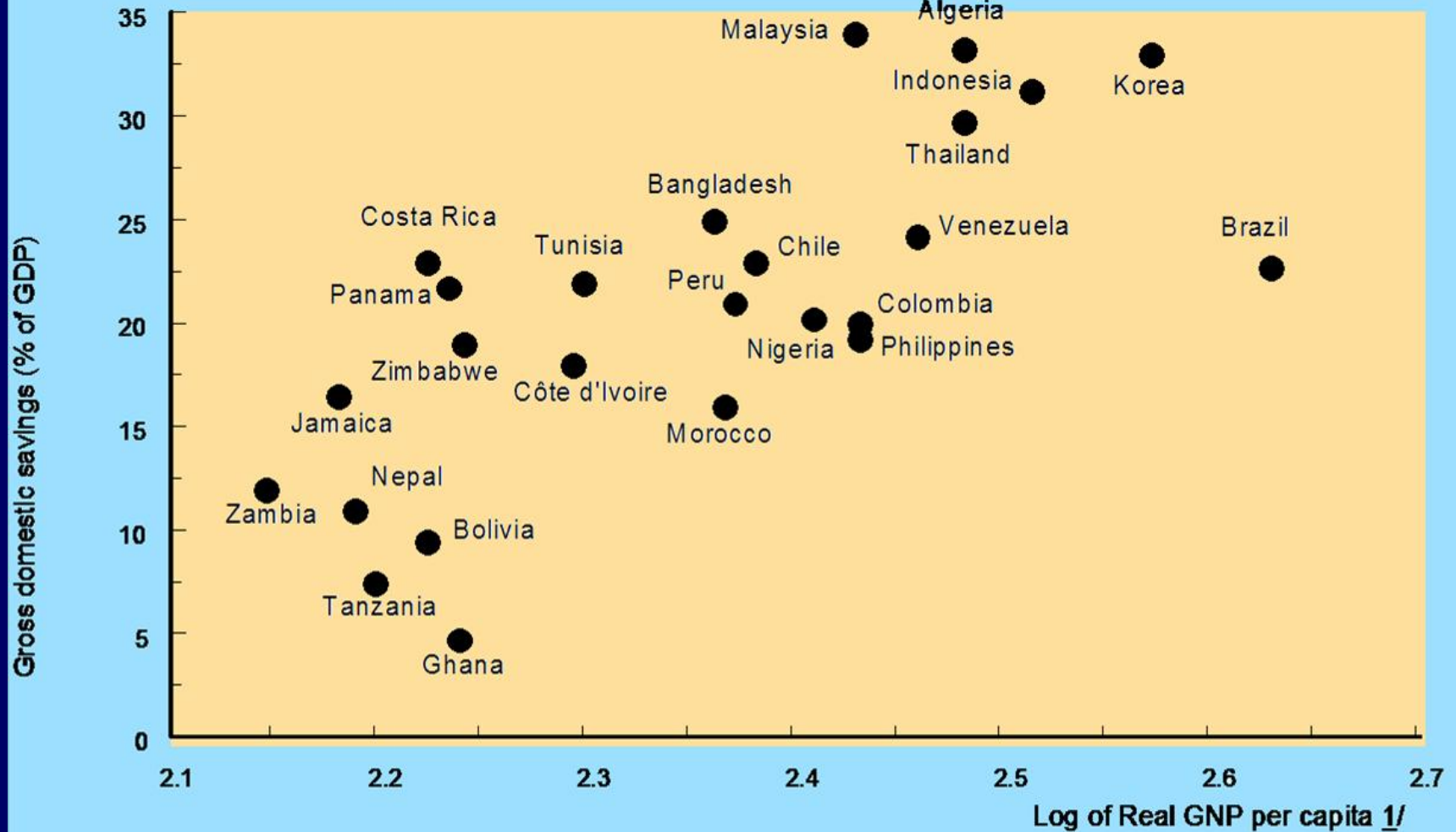
- The Solow model makes another important prediction: Developing countries with less capital per person will grow faster because each investment in capital will produce a higher return than in rich countries with ample capital.
- That is, the income levels of developing countries will tend to catch up with or **converge** towards the income levels of rich countries. One problem with the prediction of convergence is that it requires that countries be identical in every respect except their level of per capita output.

Savings Rates and per Capita Income Growth (Averages over 1980-1995)



Source: World Bank

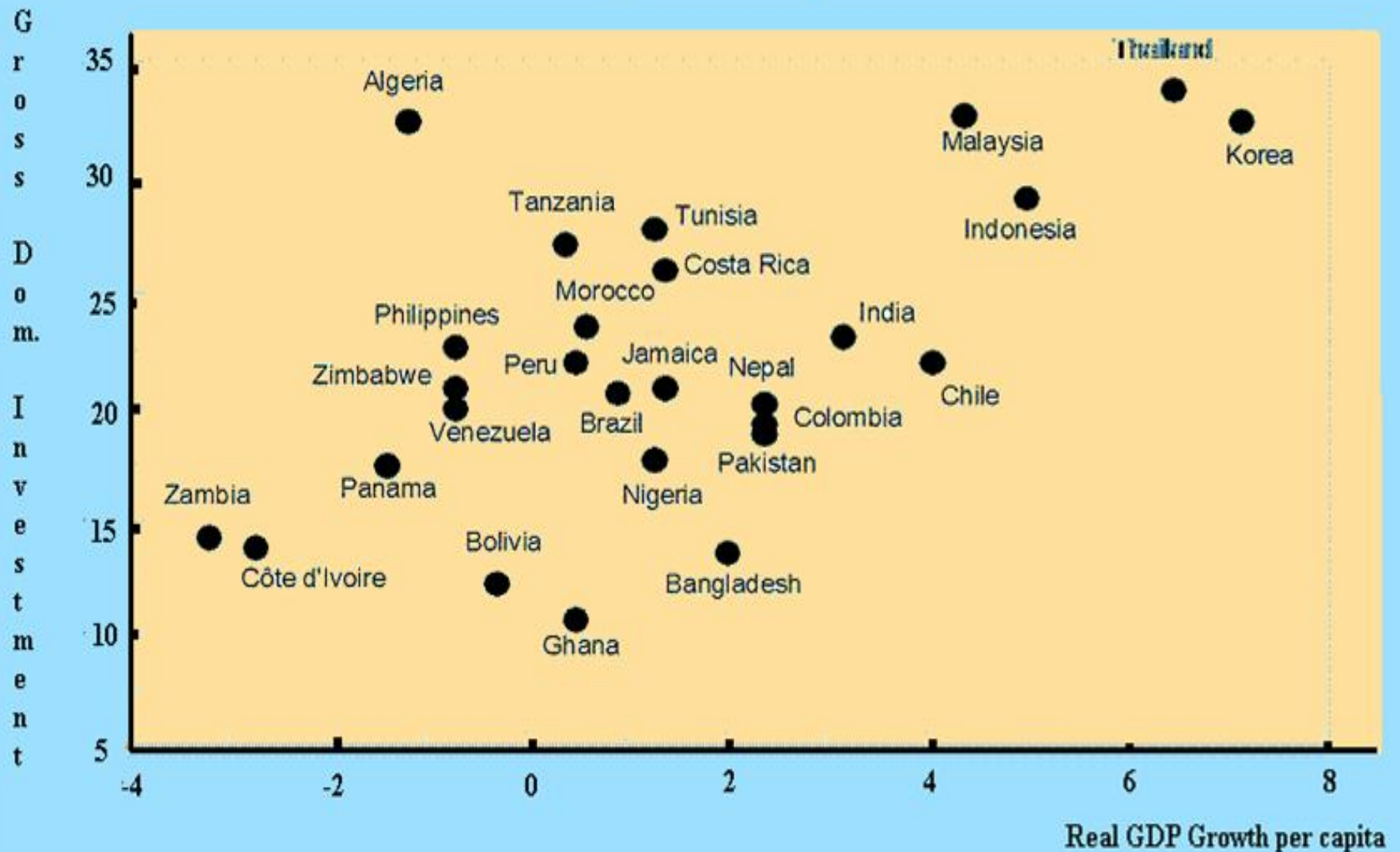
Saving Rate and Per Capita Income (Averages over 1980-95)



Source: World Bank.

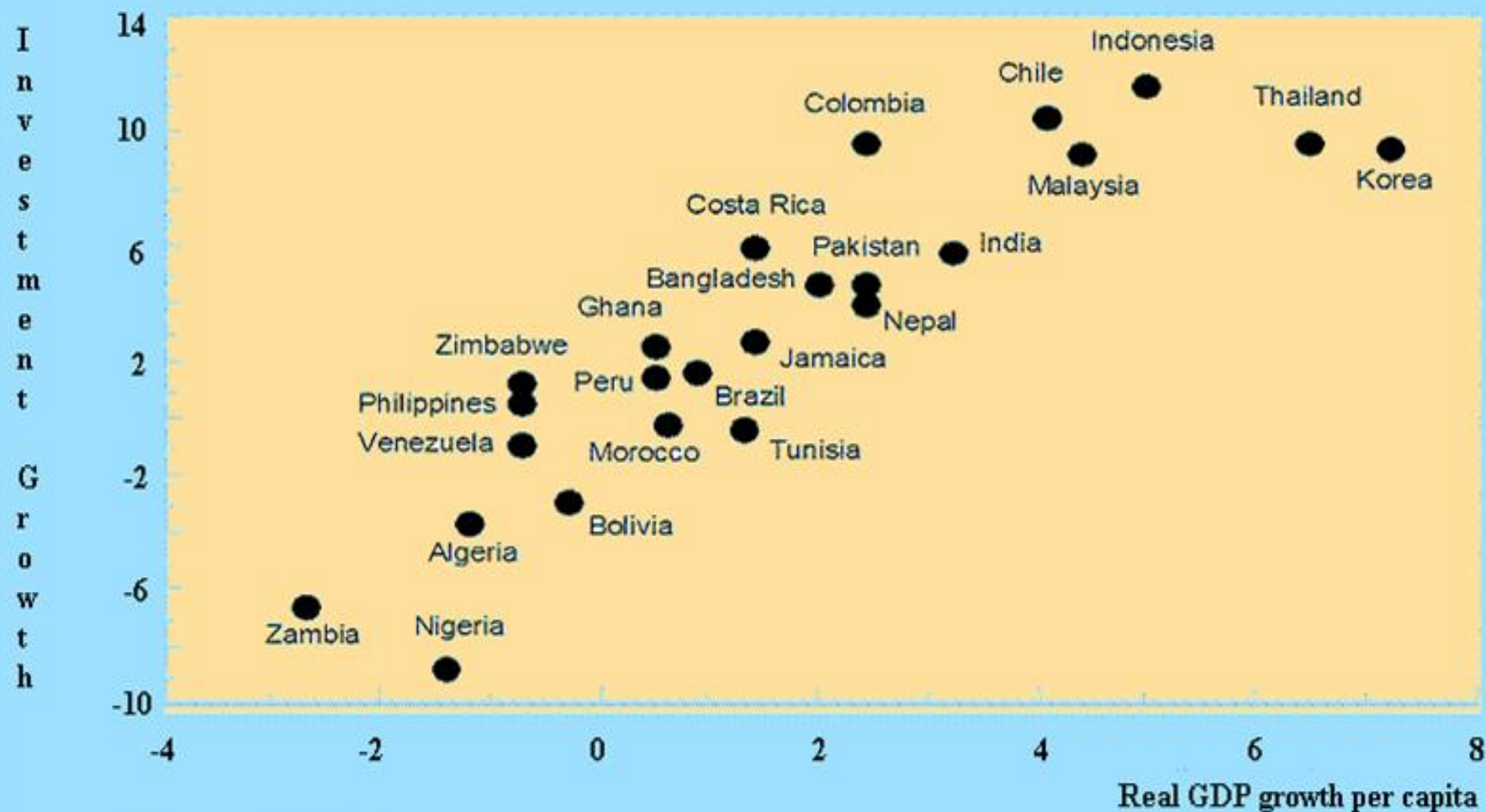
1/ In terms of US dollars at 1987 prices.

Gross Domestic Investments as % of GDP and Real GDP Growth per capita (Averages for 1980-95)



Real Gross Investment Growth and Real GDP Growth per capita

(Averages for 1980-95)



Source: World Bank

3. Endogenous Growth Models

- A major limitation of the Solow model is its reliance on “exogenous” technological change to supply sustainable growth in percapita output.
- Instead of explaining the sources of technological change, the model assumes it will occur independent of factors considered by the model.
- Another limitation is the model’s emphasis on technology alone, disregarding the empirical evidence that savings and investments are also closely related to percapita income growth over the long run.
- Thus, the neoclassical model provides only a limited framework for analyzing the effects of **government policies** on long-term growth.
- To address the shortcomings of the Solow model, Paul Romer initiated the development of new models that generate growth of per capita output **endogenously**--that is, without assuming that technological change occurs outside of the model's framework.
- Hence, they are known as **endogenous growth models**.
- Although these endogenous models share the same basic idea, they rely on different mechanisms to drive long-run growth.

- Some models explain the **channels that lead to technological change**, and others emphasize **investments in human capital** to sustain growth.

Externalities as a Channel for Technological Changes

- Paul Romer proposed the idea that **externalities/spillovers in R&D** permit the accumulation of knowledge beyond the firm, thus sustaining growth (a spillover is an action taken by one firm that affects another firm.)
- He showed that spillovers are strong enough to outweigh the drag caused by decreasing returns to capital and sustain growth in per capita output.
- Later, Romer explained why companies invest in R&D even when it will eventually benefit competitors: he found that as long as there is not any type of limit in technology, continuous innovation can allow per capita output to grow forever.
- One important advantage of Romer's model is that it does not supplant the neoclassical model but fills an important gap in the neoclassical theory by providing a rigorous description of **the source** of technological progress.
- Romer pointed out that if innovation in his model was to stop, then his model would collapse to the neoclassical model.

- Romer started from the well-known observation that technological progress takes place through innovations, in the form of new products, processes and markets, many of which are the result of economic activities, in particular **Research and Development (R&D)**.
- Because firms learn from experience how to produce more efficiently, he noted that **a higher pace of economic activity** can raise the pace of process-innovation by giving all firms more production experience.
- Furthermore, R&D activities are enhanced if it is rewarded by some form of **ex-post monopoly powers** (**patent protection** with exclusivity rights and with good **intellectual property rights**) **but with sufficient flexibility to permit externalities**.
- These factors (innovations, externalities, high GDP growth, property rights) explain productivity growth and compensate for diminishing returns on capital, contributing indefinitely to growth in income pc.
- Innovation as the motor for economic change was first described in the writings of Joseph Schumpeter (the entrepreneur and big companies -- through “creative destruction” -- replaces old technologies with new and better technologies).

Human Capital

- Other models expand the idea of endogenous growth, using different variables and functions; but retaining the same fundamental characteristic: they reverse the effects of decreasing returns to capital.
- Several models focus on the importance of accumulating human capital--gaining increased skills through formal education or on-the-job training.
- One such model (by Rebelo, 1991) is based on a variant of the H-D model, using a simple production function for the economy:

$$Y = AK$$

- where Y is output, K is the capital stock, and A is a constant measuring the amount of output produced per unit of capital.
- The key is that this production function does not exhibit the property of diminishing returns to capital. One extra unit of capital produces A extra units of output, regardless of how much capital there is.
- This absence of diminishing returns to capital is the key difference between this endogenous growth model and the Solow model.
- The capital accumulation function is similar to the H-D model:

$$\Delta K = sY - \delta K$$

- This equation states that the change in the capital stock (ΔK) equals investment (sY) minus depreciation (δK).
- Dividing this equation by K , we obtain: $\Delta K/K = sY/K - \delta$
- Since $Y/K = A$, we obtain:

$$\Delta K/K = \Delta Y/Y = sA - \delta$$

- This equation shows that, as long as $sA > \delta$, the economy's income grows forever, even without the assumption of exogenous technological progress.
- Furthermore, the permanent growth rate depends on *savings (and investments) as in the H-D model*. In Solow model, it does not.
- Thus, a simple change in the production function alters dramatically the predictions about economic growth and the role of savings and investments.
- In the Solow model, saving leads to growth temporarily, but diminishing returns to capital eventually force the economy to approach a steady state in which growth depends only on exogenous technological progress.
- By contrast, in this endogenous growth model, **saving and investment** are important for persistent percapita growth.

- But the key question is whether it is reasonable to abandon the assumption of diminishing returns to capital in this model?
- Advocates of this endogenous growth model argue that the assumption of constant (rather than diminishing) returns to capital is **plausible if K is interpreted more broadly to include Human Capital (Lucas) and Knowledge (Arrow, Romer)**.
- Clearly, knowledge is an important input into the economy's production—both its production of goods and services and its production of new knowledge.
- Compared to other forms of capital, however, **it is less natural to assume that knowledge exhibits the property of diminishing returns**. (Indeed, the increasing pace of scientific and technological innovation over the past few centuries has led some economists to argue that there are increasing returns to knowledge.)
- If we accept the view that knowledge is a type of capital, then this endogenous growth model with its assumption of constant returns to capital becomes a more plausible description of long-run economic growth.

- In most respects, these models have similar conclusions to Solow's model. But they go further in explaining the need to foster education and knowledge, which leads to innovations and technological change.
- **Although the $Y = AK$ model is the simplest example of endogenous growth, the theory has gone well beyond this.**
- One line of research has tried to develop models with more than one sector of production in order to offer a better description of the forces that govern technological progress (e.g., with one sector being R&D or Human Resources, $H \Rightarrow \mathbf{Y = K^\alpha L^\beta H^\gamma}$, **with $\alpha + \beta + \gamma = 1$.**)
- Other endogenous models focus on international trade--in particular, on how comparative advantage influences trade and growth.
- In any case, empirical studies by Robert Barro, Sala-i-Martin, et-al indeed show that long term economic growth in a group of 100 countries was explained by a number of measures of the quality of human capital (such as university school enrollment, health indicators, life expectancy), measures of investment (such as investment ratios), as well as measures of the business environment (such as rule of law, small government, favorable terms of trade).

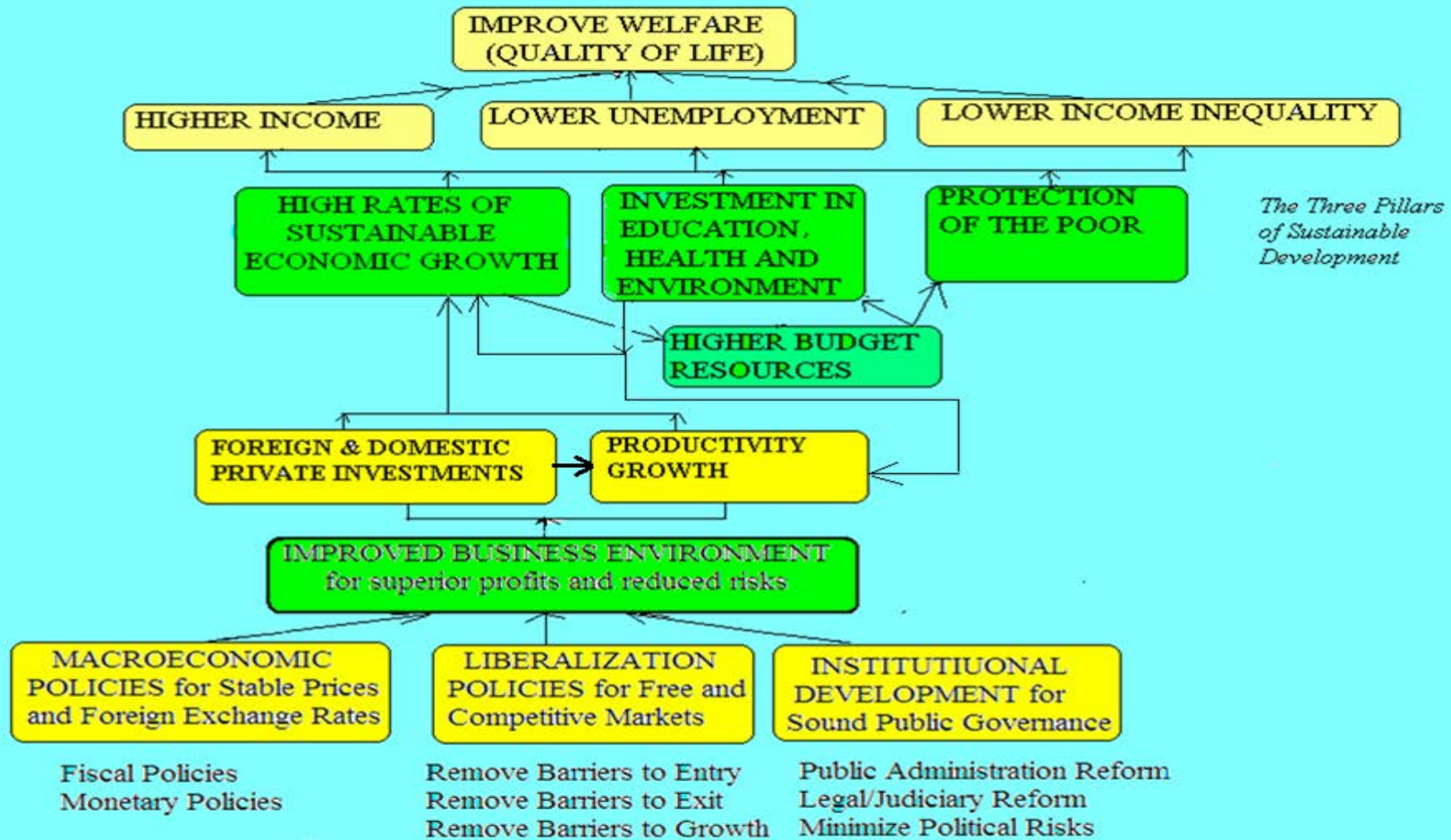
Policy Implications

- One question these models are designed to address is whether, from the standpoint of society as a whole, **private profit-maximizing firms tend to engage in too little R&D and Human Resource development.**
- The empirical work in this area suggests that **externalities** are large in R&D and education, and as a result, the social returns are larger.
- This finding justifies government support to R&D and education to policies to influence the rate of innovation by affecting the private costs and benefits of doing R&D and undertaking education.
- These policies include: lowering barriers to trade, improving competition, reducing taxes on capital income, protecting intellectual property, and promoting investments and even subsidies for education.
- Furthermore, these newer models and studies also show the importance of promoting **Foreign Direct Investments (FDIs)**, since worldwide experience has shown that FDIs provide not only capital, but new technologies and knowledge. SigmaBleyzer studies have shown that FDI's are highly influenced by the adequacy of the country's business environment.

How to induce Technological Change and Innovations

- Innovation and technological growth can be stimulated by governments based on five pillars:
 1. Improvement of the Business Environment to attract Foreign Direct Investments
 2. Supporting the provision of technology infrastructure, such as internet services, telecommunications, etc.
 3. Supporting Secondary and University education
 4. Encouraging the cooperation in Research and Development between private businesses and universities
 5. Establishing Technology Parks with government infrastructure support but managed by the private sector

C. Sustainable Economic Growth and Structural Adjustment



Economic Growth versus income inequality. Economic principles can say something about economic efficiency and growth; but little about income inequality (John Stuart Mills)

Determinants of an Improved Business Environment

(I) Macroeconomic Stabilization Policies:

- Fiscal Policies under which the Government's fiscal budget has a deficit that can be financed by borrowings on a sustainable basis (normally no more than 3% of GDP).
- Monetary Policies, under which the creation of money (money supply) will not exceed the demand for money (which is affected by income, prices and interest rates).

(II) Structural Adjustment

A. Liberalization of the Economic Environment

- Liberalization of the Formation and Operation of Enterprises
- Liberalization of the Closure of Failing Enterprises
- Liberalization of Product Markets: Pricing and Trade
- Liberalization of Factor Markets: Capital/Financial, Labor and Land Markets

B. Sound Institutions and Public Governance

- Sound & efficient Government services without corruption
- Stable and predictable legal environment
- Low political risks.

D. Structural Adjustment Programs

They were designed to achieve sustainable economic growth. They added two new elements to macroeconomic stabilization programs:

1. **Economic Liberalization:** These are policies to provide freedom to do business in a competitive environment (Stage 1 reforms) – In a market economy, the “motivator” is the freedom to make profits, whereas the “control system” is strong competition that discourages power abuse.
2. **Institutional Development and Public Governance:** Reform of the State and Legal Systems to ensure policy implementation and to make policy changes sustainable over time (Stage 2 reforms).
 - The debate is no longer about the merits of these policies. The debate is about issues of timing, sequencing, credibility and fairness, e.g.:
 - should trade be liberalized in one single shot or over time to allow local firms time to adjust?
 - Should liberalization of capital account precede reform of the financial sector or should it come later on?

- Should trade liberalization be gradual to permit EMs to develop environmental policies first?
- Should more emphasis be put on sharing the benefits of growth with the poor?
- The debate is also about sustainability of structural adjustment efforts: Stage 1 Policy Reforms could be carried out quickly, by a handful of people passing appropriate decrees and legislation.
- But there is more awareness now of the heavy “institutional” requirements (Stage 2) to successfully implement these policy reforms.
- Institutional Development and Public Governance requires more political commitment, stronger efforts, and more people are involved.
- The Stabilization and Adjustment measures and their relationship with broader country goals are outlined in the next chart and table.

D1. Economic Liberalization

The main objective of Economic Liberalization is to improve the business environment to encourage the private sector to invest and expand production, by giving them the freedom to operate in a competitive environment.

The main areas of economic liberalization are:

- Liberalization of the Formation and Operation of Enterprises.
- Liberalization of the Closure of Failing Enterprises
- Liberalization of Product Markets: Pricing and Trade
- Liberalization of Factor Markets: the Capital/ Financial Sector, Labor Market, and Land Market

1. Liberalization of the Formation and Operation of Enterprises

- Facilitate the formation of companies.
- Reduce licensing and registration requirements to establish new businesses.
- Reduce hardship to businesses from undue inspections by Govt. agencies and other interference in business activities.
- Improve Corporate Governance to define the role of the Boards of Directors, protect small shareholders, and minimize fraud and abuse of power. This requires changes in the Commercial Code.
- Reduce the cost of doing business, particularly high corporate and business taxation.
- Eliminate Monopolies and introduce Anti-trust legislation.
- Minimize number of state-owned enterprises through privatization.

2. Liberalization of the Closure of Failing Enterprises

- Improve bankruptcy law and procedures
- Institute a “hard budget” for enterprises: the Government will not bail them out if they are not viable.
- Enforce financial discipline with commercial banks to avoid bail out of their owned enterprises.
- Public utilities, particularly energy, should not be a source of subsidized financing for uneconomic firms.
- Eliminate barter transactions that obscures financial situations.
- Eliminate undue constraints to employment reduction
- Close uneconomic state enterprises

3. Liberalization of Product Pricing and Trade

- Liberalize domestic trade, eliminating price controls, trade monopolies and barter trade.
- Liberalize foreign trade, eliminating Quantitative Restrictions, reducing the level of import tariffs, and reducing their variability.
- Improve customs codes, administrations and regulations
 - o There is consensus today on the underlying benefits of trade liberalization policies.
 - o But less agreement on the dangers:
 - Doing it fast without institutional basis
 - Affecting subsistence of local firms
 - Credibility of the reforms and speed of reform.
 - Need to devalue to “help” local industry-- Proper role of Foreign Exchange policy

4. Liberalization of the Financial Sector

- Institute effective autonomy for the Central Bank, with its main goal to maintain internal and external stability.
- Liberalize Interest Rates and Credit Policies by financial institutions.
- Improve prudential regulations for banks, including introduction of international accounting standards, loan loss provisioning, external audits, and tax treatment of provisions.
- Improve banking supervision to ensure that regulations are met and establish mechanisms to deal with troubled banks.
- Remove restrictions to the flow and repatriation of capital
- Facilitate establishment of foreign banks
- Address structural banking issues, such as the governance and financial situation of the government banks, and bank lending to insolvent state enterprises.

- There is agreement that financial sector distortions do not help.
- But there is less agreement on the speed of liberalization:
 - International capital mobility makes financial sectors more vulnerable to crisis, principally if banking sector is unprepared and poorly supervised.
 - Many banks are already quite fragile in EMs.
 - Financial sector liberalization often leads to high interest rates with little additional savings, due to depth of distortions.

5. Liberalization of Labor and Land Markets

- Improve labor mobility (hiring and firing of labor)
- Reduce excessive labor costs (excessive minimum wage, payroll taxes, excessive wages due to centralized wage bargaining)
- Improve pension plans
- Improve un-employment compensation, removing impact on individual enterprises.
- Permit land privatization
- Improve land property rights, including right to buy and sell land
- Improve Land tenure, land titling and cadastral systems
- Facilitate use of land as collateral for agricultural loans

D2. Institutional Development and Public Governance: Reform of the State and Legal Systems

- Reform in Public Administration to establish sound & efficient Government services without corruption.
- Reform of the Legal Environment to achieve a stable and predictable legal environment

1.Reform Public Administration

- In many EMs, a bottleneck for the implementation of economic reforms is the inadequacies in the implementation capacity in many government agencies.
- **Public Administration Reform** has a pivotal role in ensuring that government agencies will be able to support this transformation. Central government is burdened with overlapping functions and responsibilities, cumbersome decision making, and lack of transparency.
- Many countries around the world have managed to implement successfully programs to improve public administration. The main steps as follows:
 - (1) **The role of the government in the economy should be clearly re-defined** as one of supporting private sector productive activities, rather than being in competition with the private sector. Whenever an economic activity could be carried by the private sector, it should be clear that the government should not engage in it.

- (2) A **Public Administration Task Force** should be created in the Office of the Prime Minister to initiate and control the reform public institutions. This Task Force will develop a “concept” for the reform of public administration, including the proper role of the government in a market economy. The Task Force will also ensure that there is broad political support for the reforms. The outcome would be a reform program widely accepted by stakeholders.
- (3) The reform program should start with a “**horizontal functional review**” under which the functions of all government agencies are reviewed centrally in order to eliminate overlapping and duplicative functions and improve decision making across institutions. The principle should be that there should be only one agency responsible and fully accountable for a given government function. Government by “committees” do not work well in any country.

- (4) The next step should be to carry out “**vertical functional review**” within each public institution to ensure that their functions are consistent with the redefined role of the government and identify which roles could be eliminated, transferred to lower levels of government, outsourced, or privatized. Each function should be screened by the following questions: (i) does the program/service serve a public interest?, (ii) is there a legitimate and necessary role for the government in this program/service? (iii) is the lead responsibility for this program/service assigned to the right government jurisdiction or level? (iv) could, or should, this program/service be provided in whole or in part by the private sector? (v) if the program/service continues within the existing government context, how could its efficiency and effectiveness be improved? (vi) is the program or service affordable within the existing fiscal realities?
- (5) Once the proper roles of each agency have been defined, **carry out an “operational review”** to improve the efficiency of the agencies, including the adequacy of regulations, government procurement, and operating practices and procedures.

- (6) **Based on the new functions and structures, the reform program will carry out a review of the Civil Service** to ensure that government employees are properly recruited, trained, compensated or separated.
- (7) The reform program should also include the development and implementation of a practical and user-friendly **e-government initiative** to improve accountability, responsiveness and efficiency of the public sector.
- (8) The reform should be extended to local governments. The aim should be to accelerate **decentralization reform** with an aim to build an independent and viable local self-governance. The reform program should included agreement on all necessary amendments to the Tax and Budget Codes that strengthen fiscal autonomy of the local governments. Finally, tariffs for public services, provided by local governments, must be set on a competitive and transparent basis. Essentially, full-cost recovery of these services is the only way to insure long-term feasibility of the local infrastructure and utilities.
- (9) The reform program should also streamline **state property management and privatization procedures** by improving transparency and competitiveness of the public sector. Perform mandatory, regular and independent audits of all commercial activities executed by the state.

2. Reform the Legal Environment for the Market

- Establish stable and predictable laws and regulations for businesses and free-market activities (Companies Law, Civil Codes, etc)
- Improve judicial and court procedures and decisions
- Ensure the independence and professionalism of judges
- Ensure enforceability of commercial contracts
- Limit discretionality & deal with corruption by officials
- Pass on legislation to protect intellectual property rights, patents, technology transfer policies, direct foreign investments.

Corruption:

An Anti-corruption Program should be based on three elements: (i) prevention; (ii) enforcement; and (iii) public awareness

1. PREVENTION.

The focus of prevention is:

- (i) to reduce opportunities for corruption, and
- (ii) to make corruption more difficult to undertake by improving transparency and accountability.

- Prevention would involve:
 - Privatization of Government enterprises and services to minimize corruption opportunities.
 - De-regulation, to reduce number of licenses and registrations that require individual intervention of officials.
 - Eliminate Government discretionality, by eliminating “exemptions” to laws and regulations and making laws more precise.
 - Streamline tax collections and audits.
 - Introduce competitive procedures for public procurement.
 - Reduce the size of the Government and re-focus its role to minimize opportunities for improper interventions and corruption.
 - Decentralize Government functions to bring decisions closer to the public and improve accountability
 - Reform the Civil Service to make it more professional, including (i) increasing salaries of key government officials; (ii) rotate frequently public servants in “vulnerable” positions; (iii) mandate public servants to declare their income/assets.

2. ENFORCEMENT

Develop the legal framework to ensure discipline and strong prosecution.

This would involve:

- Development of adequate avenues for “appeals” of Government decisions, including a system for review of tax decisions.
- Develop effective channels for complains of Government actions.
- Develop a strong “watchdog” agency (Audit).
- Ensure that the laws will clearly define penalties for corruption.
- Improve the court system (Judiciary) to expedite the processing and resolution of cases.
- Strengthen Enforcement agencies, such as FBI equivalents.

3. PUBLIC AWARENESS

Make people aware of their rights and the rules of the game.

For this:

- Improve Government Information Systems at all levels to keep the Government and the public informed of payments, expenditures, subsidies, etc.
- Publish widely Government rules, such as Tax Bulletins, customs regulations, quality certifications, etc.
- Enlist the support of the Press and NGOs in dealing with corruption.
- Use surveys of opinions to disseminate widely concerns on corruption.

E. Assessing Country Economic Performance

To assess country performance, two sets of issues need to be reviewed:

(1) Actual Results in key economic areas:

a. Actual Internal and External Stability

- Domestic Inflation Rate
- Stability of Foreign Exchange Rate & Balance of Payments
- Level of Foreign Debt in relation to GDP, Exports & Reserves

b. Actual Economic Growth

- GDP Growth Rates and structure of sources of growth
- Saving Rates
- Investment Rates

(2) The adequacy of Policy and Institutional Framework to sustain macroeconomic stability and economic growth: (i) internal and external economic stabilization, (ii) economic liberalization, and (iii) public governance and institutional development.

World Bank Country Policy Ratings

Country Policy and Institutional Assessments

Ratings Scale: 1 (low) through 6 (high)

- 1 Unsatisfactory for an extended period
- 2 Unsatisfactory
- 3 Moderately Unsatisfactory
- 4 Moderately Satisfactory
- 5 Good
- 6 Good for an extended period

A Macroeconomic Management and Sustainability of Reforms

- 1 General Macroeconomic Performance
- 2 Fiscal Policy
- 3 Management of External Debt
- 4 Macroeconomic Management Capacity
- 5 Sustainability of Structural Reforms.

B Policies for Sustainable and Equitable Growth

- 6 Trade Policy
- 7 Foreign Exchange Regime
- 8 Financial Stability and Depth
- 9 Banking Sector Efficiency and Resource Mobilization
- 10 Property Rights and Rule-based Governance
- 11 Competitive Environment for the Private Sector
- 12 Factor and Product Markets
- 13 Environmental Policies and Regulations

C Policies for Reducing Inequalities

- 14 Poverty Monitoring and Analysis
- 15 Pro-poor Targeting of Programs
- 16 Safety Nets

D Public Sector Management

- 17 Quality of Budget and Public Investment Process
- 18 Efficiency and Equity of Revenue Mobilization
- 19 Efficiency and Equity of Public Expenditures
- 20 Accountability of the Public Service

2001 Ratings

<u>Country</u>	<u>S&P's</u>	<u>WB</u>		<u>Country</u>	<u>S&P's</u>	<u>WB</u>	
Chile	A-	5.1		Panama	BB+	4.3	-
Slovenia	A	4.6		Argentina	BB	4.3	-
Hungary	BBB	4.6	+	El Salvador	BB	4.1	+
Poland	BBB-	4.6	+	Peru	BB	4.1	-
Estonia	BBB+	4.5	+	South Africa	BB+	4.1	+
Tunisia	BBB-	4.4	+	South Korea	BB+	4.0	+
Czech Rep	A-	4.2		Philippines	BB+	3.9	
Colombia	BBB-	4.2	-	Brazil	B+	3.9	
Uruguay	BBB-	4.2	-	Mexico	BB	3.7	+
Latvia	BBB	4.2	+	India	BB	3.7	
Malaysia	BBB-	4.1	+	Kazakhstan	B+	3.7	+
China	BBB+	3.9	-	Morocco	BB	3.7	
Lithuania	BBB-	3.9	+	Turkey	B	3.7	-
Slovakia	BBB-	3.9	+	Venezuela	B+	3.2	-
Thailand	BBB-	3.8		Indonesia	CCC+	3.1	
Croatia	BBB-	3.7		Russia	CCC-	2.9	+
Egypt	BBB-	3.6	-	Ukraine	B+	2.6	
				Paraguay	BB-	2.5	-

F. Accelerating Growth through Foreign Direct Investments

Major Deterrents for FDI. An ICPS survey of 65 large foreign firms ranked the major deterrents to FDI in Ukraine in the following order, descending in significance:

- Excessive Government's regulations
- Ambiguity of the legal system
- Uncertainty of the economic environment
- Corruption
- High Tax burden
- Problems establishing clear ownership conditions
- Difficulty negotiating with Government authorities
- Volatility of the political environment
- Lack of physical infrastructure

- Starting from this basis, SigmaBleyzer studies of over 100 countries concluded that macroeconomic stability was a precondition for FDI and identified nine key “policy actions” or “drivers” that “induce” foreign investments (www.sigmableyzer.com) :
 1. Secure domestic and foreign Macroeconomic stability
 2. Liberalize and Deregulate Business Activities
 3. Provide a Stable and Predictable Legal Environment
 4. Reform Public Administration, including Taxation
 5. Remove International Capital & Foreign Trade Restrictions
 6. Facilitate Financing of Businesses by the Financial Sector
 7. Prevent and Deal with Corruption
 8. Minimize Political Uncertainties and Risks
 9. Improve the Country’s International Image

IFC-World Bank Report: Doing Business 2011

UKRAINE

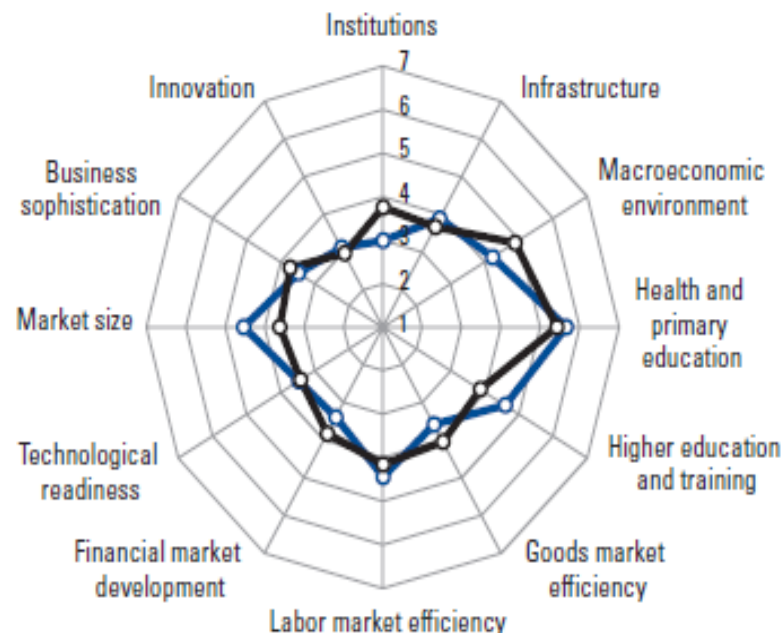
		Eastern Europe & Central Asia	GNI per capita (US\$)	2,800	
Ease of doing business (rank)	145	Lower middle income	Population (m)	46.0	
✓ Starting a business (rank)	118	Getting credit (rank)	32	Trading across borders (rank)	139
Procedures (number)	10	Strength of legal rights index (0-10)	9	Documents to export (number)	6
Time (days)	27	Depth of credit information index (0-6)	3	Time to export (days)	31
Cost (% of income per capita)	6.1	Public registry coverage (% of adults)	0.0	Cost to export (US\$ per container)	1,560
Minimum capital (% of income per capita)	2.2	Private bureau coverage (% of adults)	10.1	Documents to import (number)	8
				Time to import (days)	36
✓ Dealing with construction permits (rank)	179	Protecting investors (rank)	109	Cost to import (US\$ per container)	1,580
Procedures (number)	22	Extent of disclosure index (0-10)	5		
Time (days)	374	Extent of director liability index (0-10)	2	Enforcing contracts (rank)	43
Cost (% of income per capita)	1,737.6	Ease of shareholder suits index (0-10)	7	Procedures (number)	30
		Strength of investor protection index (0-10)	4.7	Time (days)	345
Registering property (rank)	164			Cost (% of claim)	41.5
Procedures (number)	10	✓ Paying taxes (rank)	181		
Time (days)	117	Payments (number per year)	135	Closing a business (rank)	150
Cost (% of property value)	4.1	Time (hours per year)	657	Time (years)	2.9
		Total tax rate (% of profit)	55.5	Cost (% of estate)	42
				Recovery rate (cents on the dollar)	7.9

World Economic Forum: Global Competitiveness 2011-2012

Global Competitiveness Index

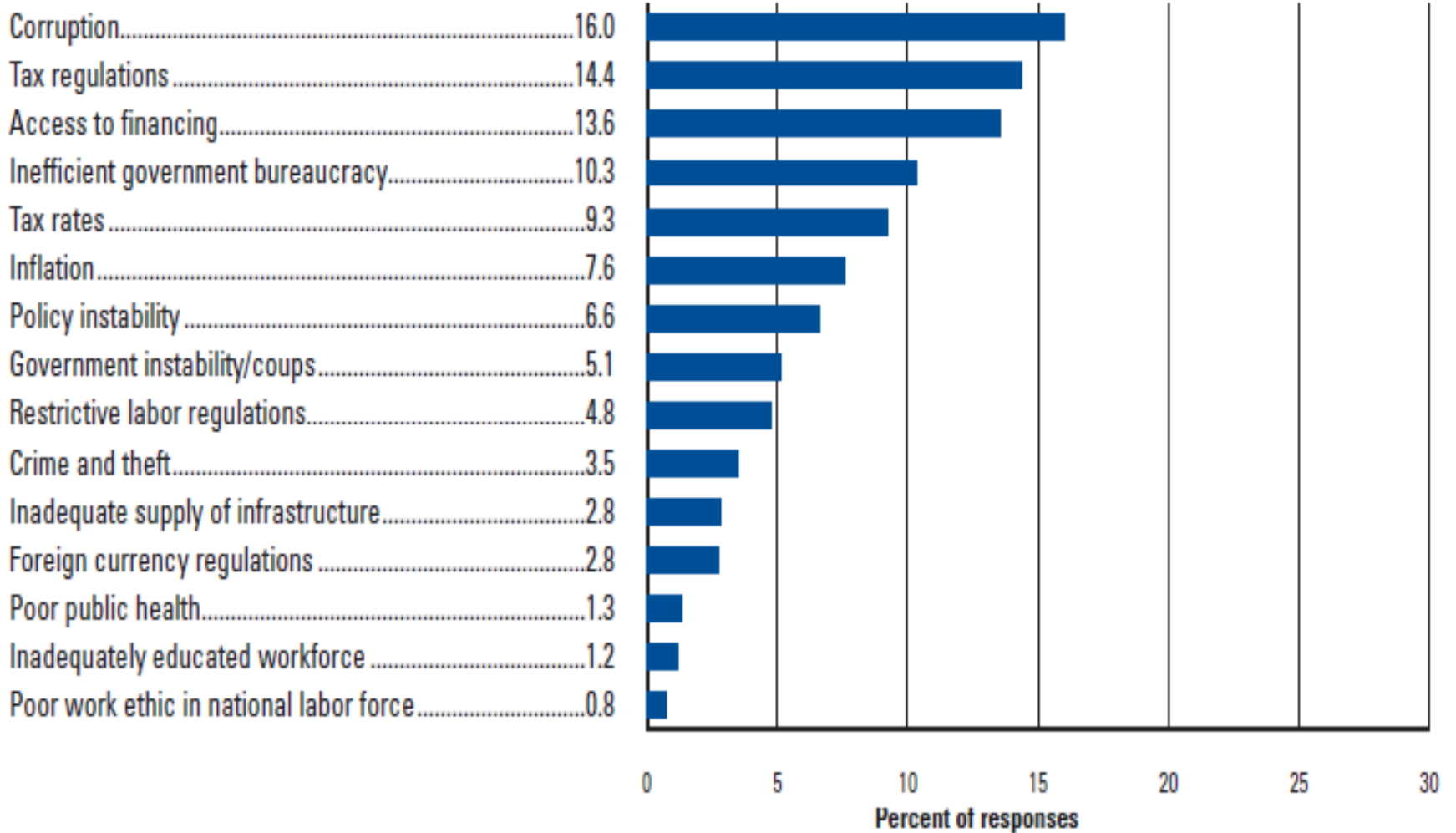
	Rank (out of 142)	Score (1-7)
GCI 2011-2012	82	4.0
GCI 2010-2011 (out of 139).....	89	3.9
GCI 2009-2010 (out of 133).....	82	4.0
Basic requirements (40.0%)	98	4.2
Institutions.....	131	3.0
Infrastructure.....	71	3.9
Macroeconomic environment.....	112	4.2
Health and primary education.....	74	5.6
Efficiency enhancers (50.0%)	74	4.0
Higher education and training.....	51	4.6
Goods market efficiency.....	129	3.6
Labor market efficiency.....	61	4.4
Financial market development.....	116	3.4
Technological readiness.....	82	3.5
Market size.....	38	4.5
Innovation and sophistication factors (10.0%)	93	3.3
Business sophistication.....	103	3.5
Innovation.....	74	3.1

Stage of development



—○— Ukraine —○— Economies in transition from 1 to 2

The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

The Heritage Foundation: 2012 Index of Economic Freedom

- Ukraine's economic freedom score places it No. 163 in the 2012 Index.
- Ukraine is ranked last out of 43 countries in the Europe region, and its overall score is lower than the world average.
- Poor protection of property rights and widespread corruption discourage entrepreneurial activity, severely undermining prospects for long-term economic expansion.
- The rule of law is weak, and the judicial system remains susceptible to substantial political interference.
- After several years of strong growth, Ukraine's economic vitality has deteriorated, partly because of the global economic slowdown and also because of the generally sluggish pace of efforts to improve regulatory efficiency and open markets to international investment.
- Recent large fiscal deficits have strained public finances, forcing Ukraine to confront the challenge of restoring sustainable levels of public spending.

Corruption

- The rule of law is uneven across the country, and protection of property rights is weak. The judiciary is subject to executive branch and criminal pressure, and judicial corruption is significant. Contracts are not well enforced, and expropriation is a threat. Ukraine is a major transshipment point, storage location, and market for illegal optical media produced in Russia and elsewhere. Corruption pervades all levels of the executive branch.

Ukraine's freedom rankings

Publication (Institution)	World Rankings			
	2008	2009	2010	2011
Index of Economic Freedom (The Heritage Foundation/Wall Street Journal)	133	152	162	164
Doing Business (The World Bank)	146	145	142	145
Corruption Perceptions Index (Transparency International)	134	146	134	n/a
Global Competitiveness Report (The World Economic Forum)	73	82	89	n/a

Sources: Terry Miller and Kim R. Holmes, 2011 Index of Economic Freedom; The World Bank, Doing Business, Economy Rankings; World Economic Forum, Global Competitiveness; Transparency International, 2010 Corruption Perceptions Index.