A SURVEY

RECENT CROSS-COUNTRY STUDIES OF GROWTH

RESISTA DE ANALISIS ECONOMICO. V. 8, N. 2 (OCTUBRE 1999)
The acquisition plan of capital per worker is shown by

\[ \text{Recent Cross-country Stages of Growth and Variety} \]
TABLE I

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RECENT CROSS-COUNTRY STORIES OF COUNTRY'S SURVEY

DETERTED VARIABLES IS GRADE

THE CONCLUSION FOR ECONOMIC GROWTH AT A CERTAIN LEVEL OF GROWTH IN OVERALL, THE GROWTH OF

THE GROWTH OF THE ECONOMIC STAGES, WHICH IN THE NEW ECONOMIC FRAMEWORK ARE NOT YET

REVIEW OF THE CROSS-COUNTRY STUDIES
The use of cross-country studies of growth is an important tool in understanding the differences in economic performance across countries. These studies help to identify the factors that contribute to economic growth and to evaluate the effectiveness of various economic policies. The empirical analysis of cross-country growth is a rich field of research, with many studies focusing on the role of human capital investment, technological progress, and institutional factors in driving economic growth.

For example, the Solow growth model, which is widely used in economic growth analysis, postulates that economic growth is driven by increases in the capital/labor ratio and technological progress. The model assumes that the rate of growth of potential output is determined by the rate of growth of the capital/labor ratio, which in turn depends on the rate of investment and the rate of population growth. The model also assumes that the rate of technological progress is constant and exogenous, and that it does not depend on the rate of growth of the capital/labor ratio.

In the Solow model, GDP per capita is given by

\[ y_t = A_t K_t^{\alpha} L_t^{1-\alpha}, \]

where \( y_t \) is GDP per capita, \( A_t \) is the level of technological progress, \( K_t \) is the capital/labor ratio, \( L_t \) is the labor force, and \( \alpha \) is the share of output produced by capital. The rate of growth of GDP per capita is then given by

\[ \frac{\Delta y}{y} = \alpha \frac{\Delta K}{K} + (1-\alpha) \frac{\Delta L}{L} \]

where \( \Delta K \) is the rate of growth of the capital/labor ratio, and \( \Delta L \) is the rate of growth of the labor force. The rate of growth of the capital/labor ratio is given by

\[ \frac{\Delta K}{K} = (s - n) \frac{K}{L}, \]

where \( s \) is the rate of investment, \( n \) is the rate of population growth, and \( \frac{K}{L} \) is the capital/labor ratio. The rate of growth of GDP per capita is then

\[ \frac{\Delta y}{y} = \alpha (s - n) \frac{K}{L}. \]

This equation shows that the rate of growth of GDP per capita depends on the rate of investment, the rate of population growth, and the level of capital/labor ratio.

In conclusion, cross-country studies of growth are an essential tool in economic analysis. They help to identify the factors that drive economic growth and to evaluate the effectiveness of economic policies. The Solow growth model is a useful framework for analyzing these factors, and it provides a useful starting point for empirical analysis in this area.

The recent cross-country studies of growth have focused on understanding the factors that drive economic growth and development across nations. These studies aim to identify the key determinants of growth, evaluate the effectiveness of economic policies, and provide insights for policymakers. The surveys cover a wide range of methodologies and data, reflecting the diversity of approaches taken by researchers in this field.

Some of the key findings from these studies include:

- **Economic Institutions:** The quality and efficiency of economic institutions, such as the rule of law and property rights, play a critical role in economic growth. Countries with more developed and efficient institutions tend to experience higher growth rates.

- **Human Capital:** Investments in education and health are crucial for sustaining economic growth. Countries with higher literacy rates and better health outcomes tend to have higher growth rates.

- **Technological Progress:** The adoption and innovation in technology are essential for growth. Countries that invest more in research and development and harness the benefits of new technologies tend to grow faster.

- **Policy Environment:** The effectiveness of macroeconomic policies, such as fiscal and monetary policies, also influences growth. Policies that promote stability and support investment can stimulate growth.

- **Natural Resources:** Countries with abundant natural resources may see initial growth, but this can be unsustainable if exploitation is not managed properly.

These studies underscore the importance of a holistic approach to economic growth, considering both exogenous factors and endogenous policies. Future research in this area should focus on refining methodologies, improving data quality, and addressing emerging challenges, such as climate change and digital disruption.
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<th>Paper</th>
<th>Methodology</th>
<th>Sample</th>
<th>Findings</th>
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<tr>
<td>Baumol (1986)</td>
<td>He runs growth rate between 1870-1985 on initial GDP level.</td>
<td>16 industrialized countries.</td>
<td>He finds convergence in an absolute sense.</td>
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<td>De Long (1988)</td>
<td>He corrects Baumol’s piece of work by sample selection bias and measurement error in the independent variable.</td>
<td>Same as Baumol’s sample minus Japan plus Argentina, Chile, Spain, Portugal, East Germany, Ireland and New Zealand.</td>
<td>There is no convergence if countries that were likely to converge back in 1870 are included and if small measurement error on 1870 GDP are allowed.</td>
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<td>Barro (1989)</td>
<td>He runs growth between 1960-1985 on 1960 GDP and other variables to control for initial human capital distortions, dummy regions and political instability.</td>
<td>98 countries using Summer-Heston data.</td>
<td>No convergence in absolute terms (growth rate on initial level of GDP), but there exists convergence controlling for the variables mentioned in column 2.</td>
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<td>Mankiw-Romer-Weil (1992)</td>
<td>They ran log of labor productivity on saving rate, growth rate of population, depreciation rate plus the exogenous growth rate of the technology level. Later they include a proxy of human capital.</td>
<td>98 Non-oil exporter, 75 countries with intermediate quality of data, 22 OECD countries. All samples come from Summer-Heston data.</td>
<td>There are no substantial externalities associated to physical capital accumulation. There is convergence in level of GDP per working person. The value of the capital share (α) is too large using the textbook Solow’s model. But using an augmented Solow model, that includes human capital, the α reaches the expected I/3.</td>
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<td>Barro and Sala-i-Martin (1990)</td>
<td>They distinguish between σ-convergence (the standard deviation of per capita incomes) and β-convergence (from the regression of growth rate on the initial level).</td>
<td>48 states of USA. They calculate growth rate for different time periods since 1880 to 1988.</td>
<td>They found β-convergence using per-capita personal income and per-capita gross state product. The estimated β tends to be more stable after controlling by region and by sectoral composition. The speed of convergence is slower than the one predicted by traditional textbook models.</td>
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### Macroeconomic Variables and Growth

| Kormendi and Meguire (1985)   | The macroeconomic variables included are the standard deviation of money supply shocks, the mean of money supply growth, the rate of inflation, growth of exports as proportion of output, ratio of government spending to output. | 47 countries.                                                          | They found evidence that growth depends on the standard deviation of money supply shock and investment rate. Weak or no evidence that openness, government spending and inflation rate affect growth. |
| Fisher (1991)                 | He runs regressions of growth rate on initial GDP, initial school enrollment, investment share, inflation, external debt, dummies for region and government budget surplus. | Pooled cross-section time series data for the period 1972-85.           | He found some weak relations between the macroeconomic variables included an growth. An indirect effect through investment seems to be the most important one. |

### Openness and Growth

| Edwards (1991)               | Technological change depends on the gap between the country’s stock of knowledge, and the ability to absorb new technology. The latter if associated to the degree of openness. | Sample of 30 developing countries.                                     | He found a robust relationship between growth in per-capita GDP and different measures of openness. The gap between the stocks of knowledge was estimated by initial GDP and by R&D. He also includes investment to GDP ratio which showed a strong positive relation with growth. |
| Roubini and Sala-i-Martin (1991) | The same context as in Barro (1989)’s study. They add a measure of effective rate of protection, exchange rate misalignment, and financial repression. | Sample of 85 countries and 53 countries depending on the availability of the data. | Negative relation between trade distortions, financial repression and growth. Financial repression was proxied by real interest rate, bank’s reserves to money, and inflation rate. A dummy for Latin America in Barro (1989) becomes non significant when financial repression and trade distortions are included. |
Therefore, the model estimated would be:

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coefficient regression be estimated of models that were included from X'1 and X'2

The question is: is a good question since there are important and material content, if there is a good question is there a possible answer that can be derived from the question? If the question has a possible answer, then it makes it possible for the question to be answered.

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Innovation

La industria chilena, 1975-1988

Entrega de Manifiesto Económico Vol. 8 N° 2 (Noviembre 1993)

RESUMEN DE ANALISIS ECONOMICO. VOL. 8 N° 2

LA INDUSTRÍA CHILENA, 1975-1988

AEROPUERTOS Y AEROLÍNEAS: PROSPECTIVAS

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Innovacion