

Policy Benchmarking for Productivity and Growth in the Caribbean^{1/}

Karl Melgarejo
IDB

*45th Annual Monetary Studies
Bank of Jamaica
October 4, 2013*

1/ Based on D'Acosta, Melgarejo and Mercer-Blackman (2013)



Benchmarking: what is it?

Benchmarking is the process of comparing.

Benchmarking: why benchmarking?

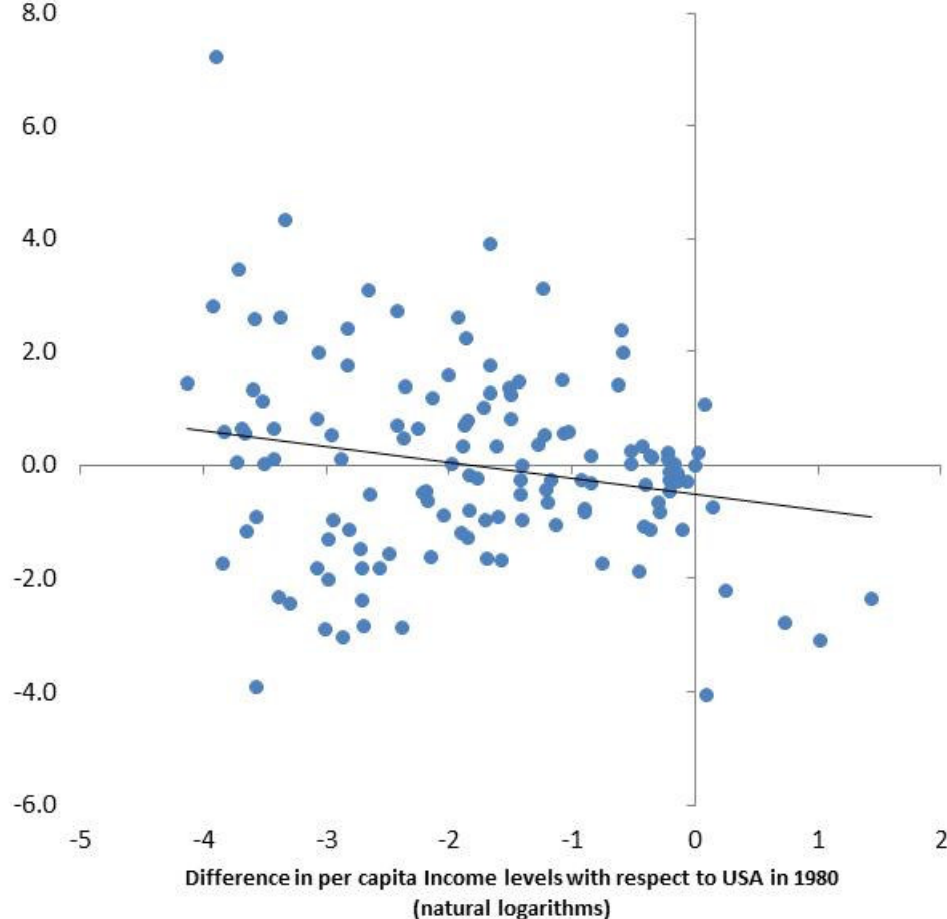
- A quote from OECD chief economist:

“Emulating best practices is how economies that are lagging behind can achieve economic convergence”.

Benchmarking: why benchmarking?

Graph 1. Economic Convergence

Difference in growth ratios with respect to USA;
2013-1980 annual ratios (percentage points)



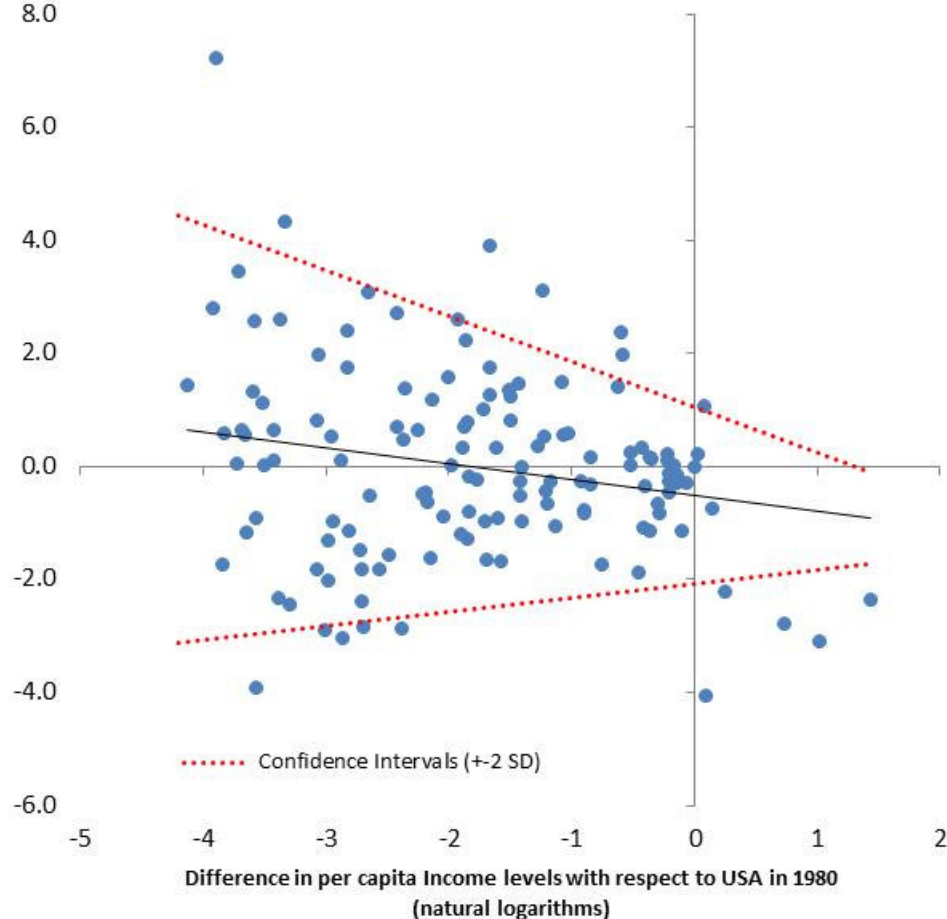
Source: WEO April 2013 – IMF; Author's elaboration

- Economic convergence (i.e. “Catch up” effect).
- Hypothesis: less productive countries have a greater potential to grow at faster rates than richer countries.
- It actually holds, but...

Benchmarking: a caveat... heterogeneity

Graph 1. Economic Convergence

Difference in growth ratios with respect to USA;
2013-1980 annual ratios (percentage points)



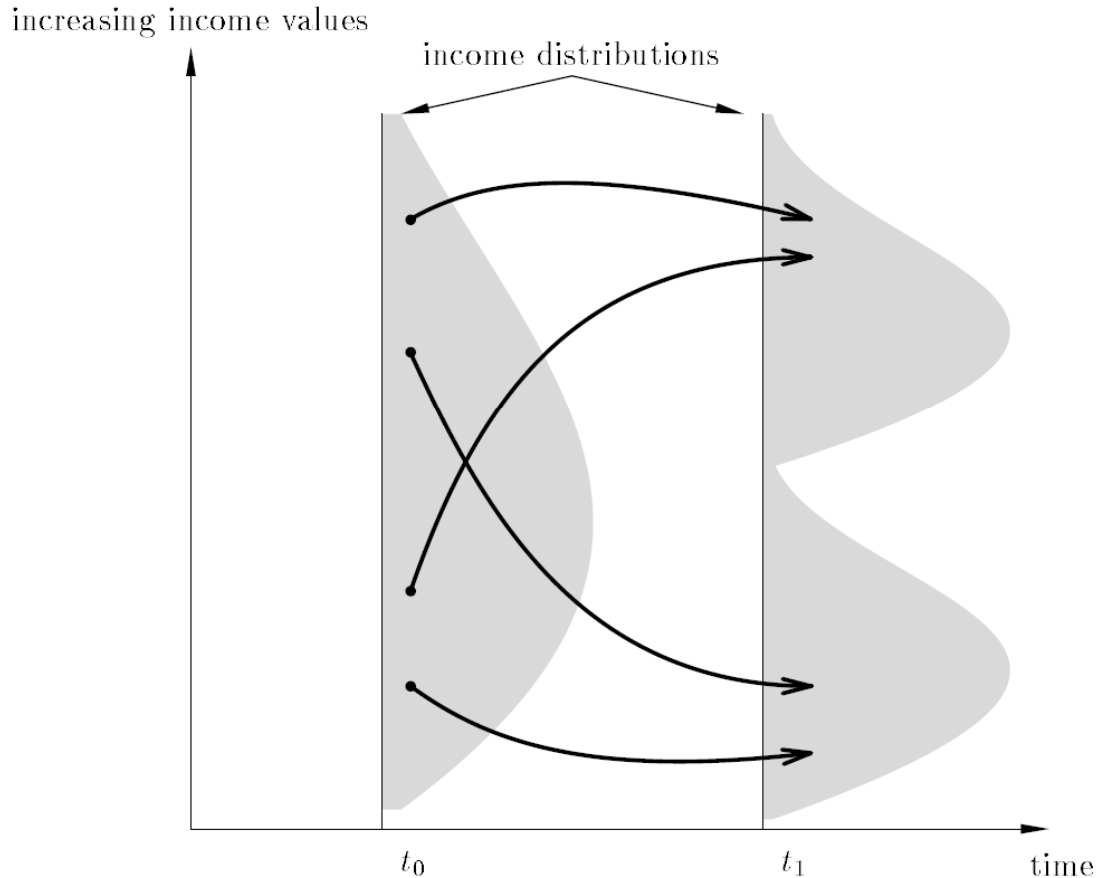
- Conditional variance.
- High variance in less developed countries.
- Seems to be that specific features (or structural characteristics) matter when a country is less developed

Source: WEO April 2013 – IMF; Author's elaboration

Note: Confidence Intervals estimated by using a Conditional Heteroscedasticity model.

Benchmarking: a caveat... heterogeneity

Graph 2. Twin-peaks distribution dynamics



- Convergence Clubs form endogenously
- Different convergence dynamics depending on the initial distribution of characteristics across countries.
- In this graph: Polarization (the rich becoming richer, the poor poorer, and the middle class vanishing); but also stratification, overtaking and divergence.

Source: Danny Quah (1995), "Empirics for Economic Growth and Convergence".

Benchmarking: a common denominator

Graph 3. Caribbean countries



Small Economies



Benchmarking: a common denominator

Simon Kuznets (1960)

- *“...the economic structure of small nations is typically less diversified than that of large units.”*
- *“Foreign trade is of greater weight in the economic activity of small nations than in larger units.”*

William G. Demas (1965)

“... under-development and self-sustained growth cannot be considered in isolation from the size of a particular country.”

“... difficulties faced by very small countries in achieving growth and breaking out the vicious circle of under-development...”

Smallness Issue

Ongoing research activity of the Caribbean Economic Team at the IDB.

Benchmarking: selecting the benchmark

CCB countries

- Caribbean countries which are members of the IDB:
 - 1.- The Bahamas, Barbados and Jamaica (tourism dependents)
 - 2.- Guyana, Suriname and Trinidad & Tobago (commodity exporters)

Small Economies

- Those countries with population less than 3.5 millions.

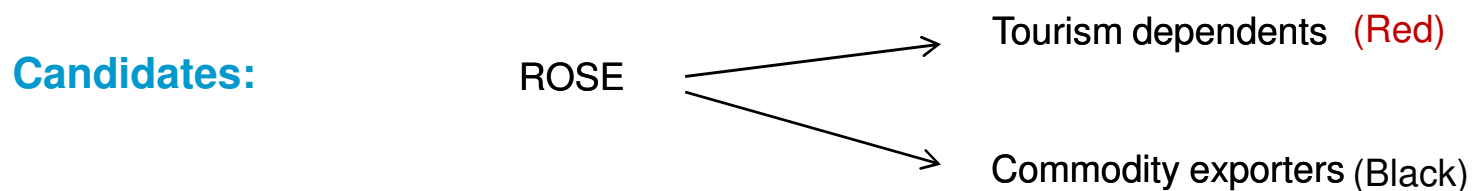
ROSE

- Stands for Rest of Small Economies

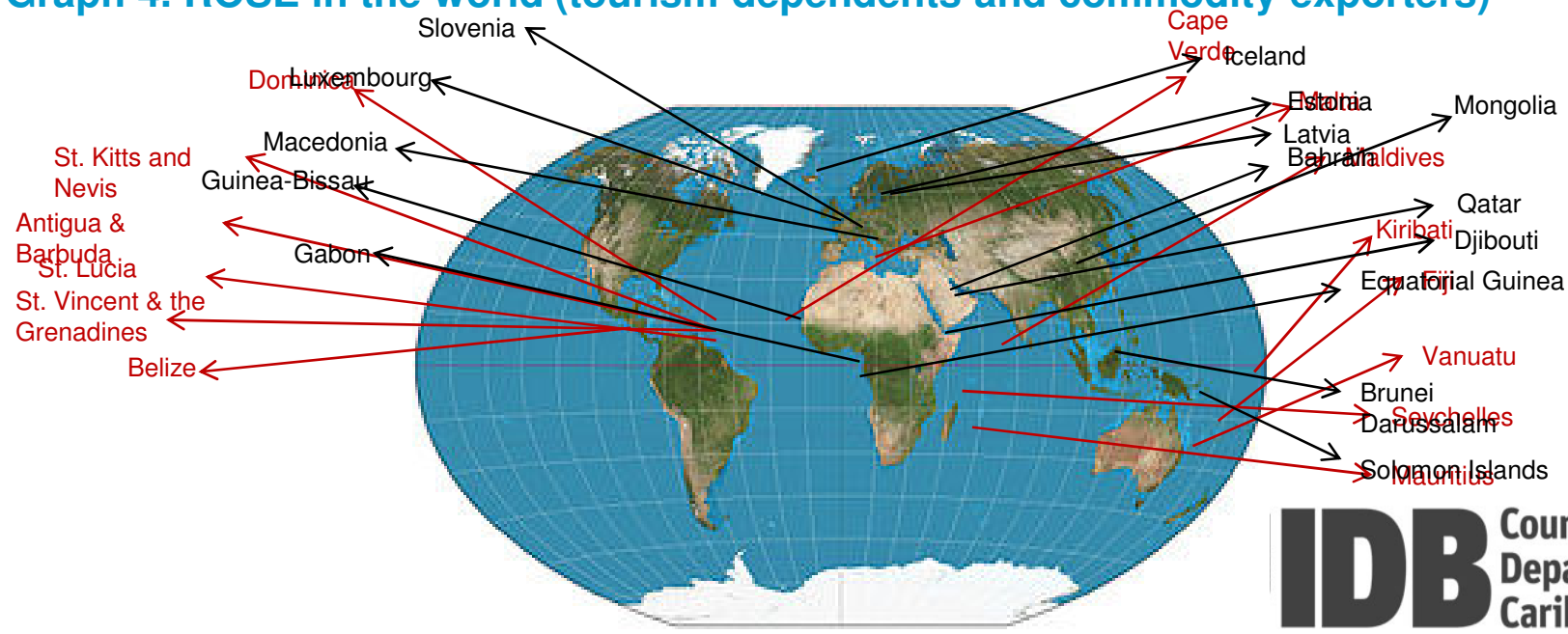
Benchmarking: selecting the benchmark

How to choose it? Country or group of countries with similar characteristics

What characteristics? Size / Open (trade, finance) / Trade in Ss or Gs

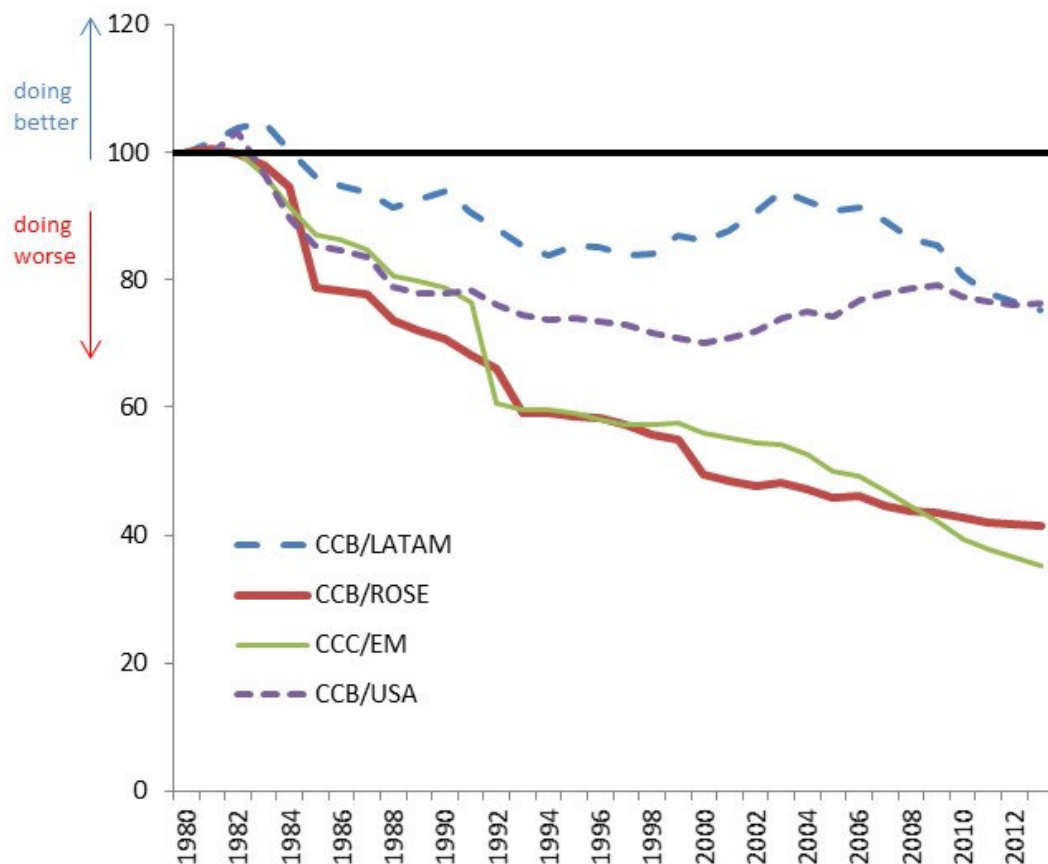


Graph 4. ROSE in the world (tourism dependents and commodity exporters)



Benchmarking: selecting the benchmark

Graph 5. Caribbean GDP relative to other country-groups (1980 - 2011)



- Nevertheless, the figure doesn't change at all.
- Caribbean countries are still losing ground.

Source: WEO April 2013 – IMF; Author's elaboration

Methodology

Methodology

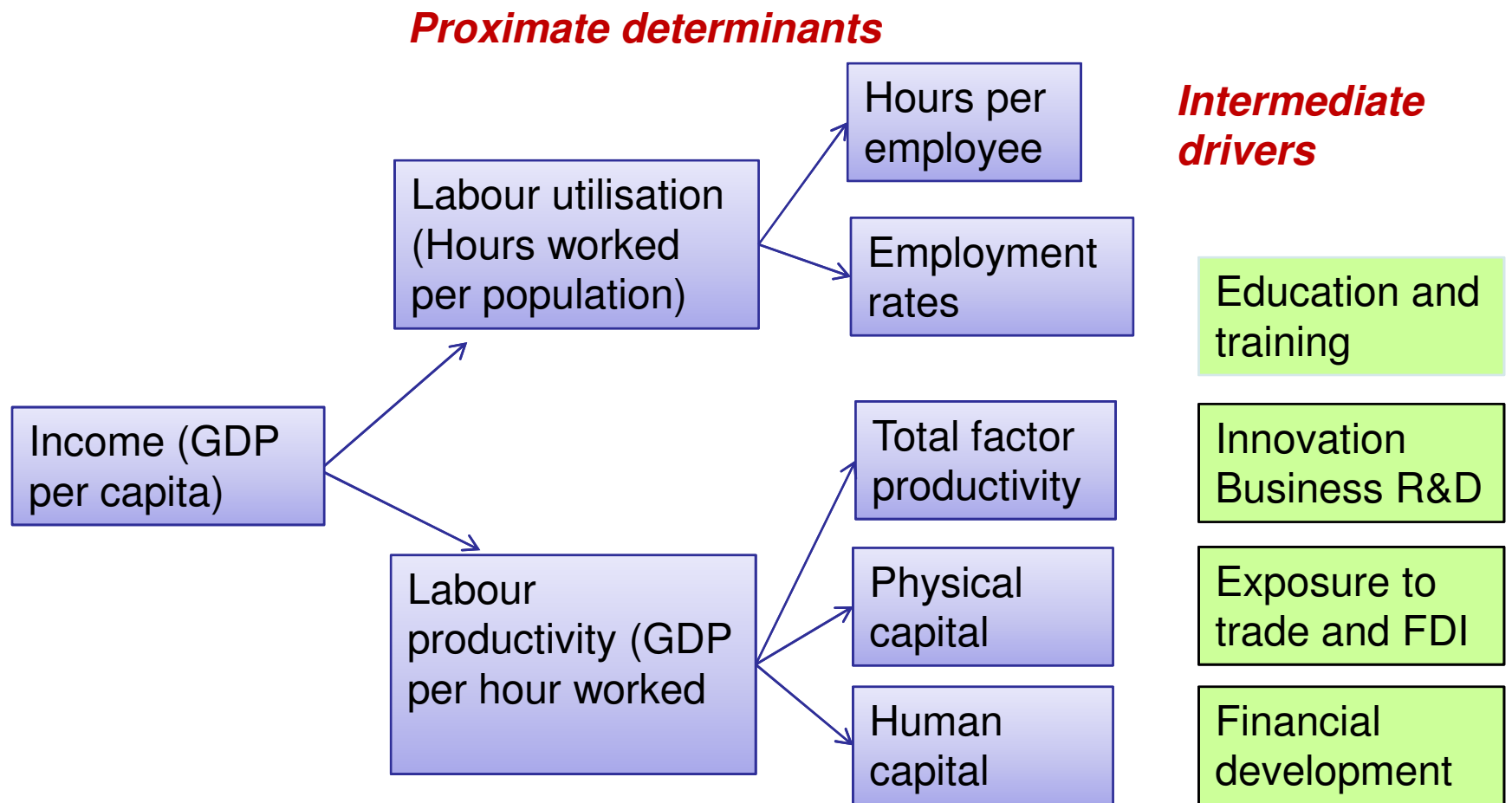
- Performance indicators
- Policy Indicators
- Matching process
- Identification

Methodology: The OECD 'Going for Growth' process



- Main focus on maximizing (long-run level of) GDP per capita convergence (fiscal/financial issues affect business cycle).
- Benchmarking based on matching **performance** and **policy indicators**.
- Identify 5 priorities for each country.
- Discuss with government, private sector or other representatives of each country priorities that emerge from the exercise.
- Follow-up, review, adjust methodology.

What are the performance indicators? A simplified overview



Source: OECD

What are the performance indicators?

A simplified overview

What is the main goal?

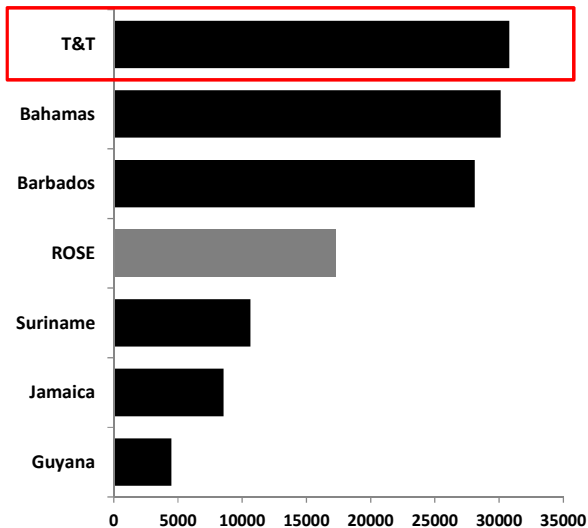


Income (GDP per capita)

Labour utilisation (Labour force / population)

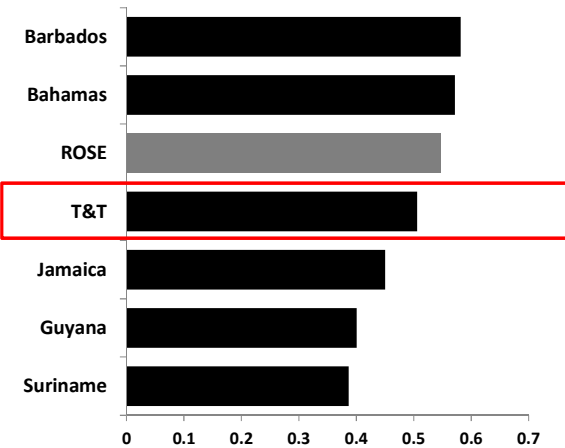
Labour productivity (GDP per worker)

GDP per capita 2010 (I\$ 2005)

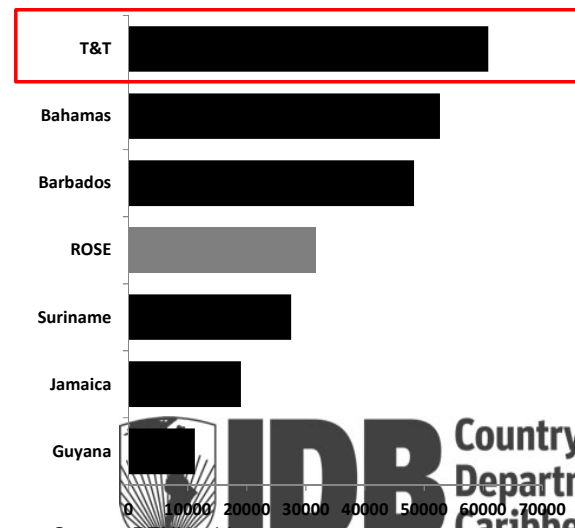


Source: PENN table

Labour utilization 2010



GDP per worker 2010 (I\$ 2005)



Source: PENN table

What are the policy indicators?

A simplified overview

Product market

Regulation (stance)

Barriers to entrepreneurship

State control

Barriers to trade and investment

Taxation and subsidies

Tax structure

Corporate taxation

Innovation Incentives

Labour market

Regulation

Employment protection

Minimum wage

Tax and benefit system

(Dis-)incentives to work embedded in tax and benefit system

Labour tax wedges

Institutions

Bargaining system

Union density

Other areas

Various measures

Education

Financial market (financial repression)

Agriculture and energy (subsidies)

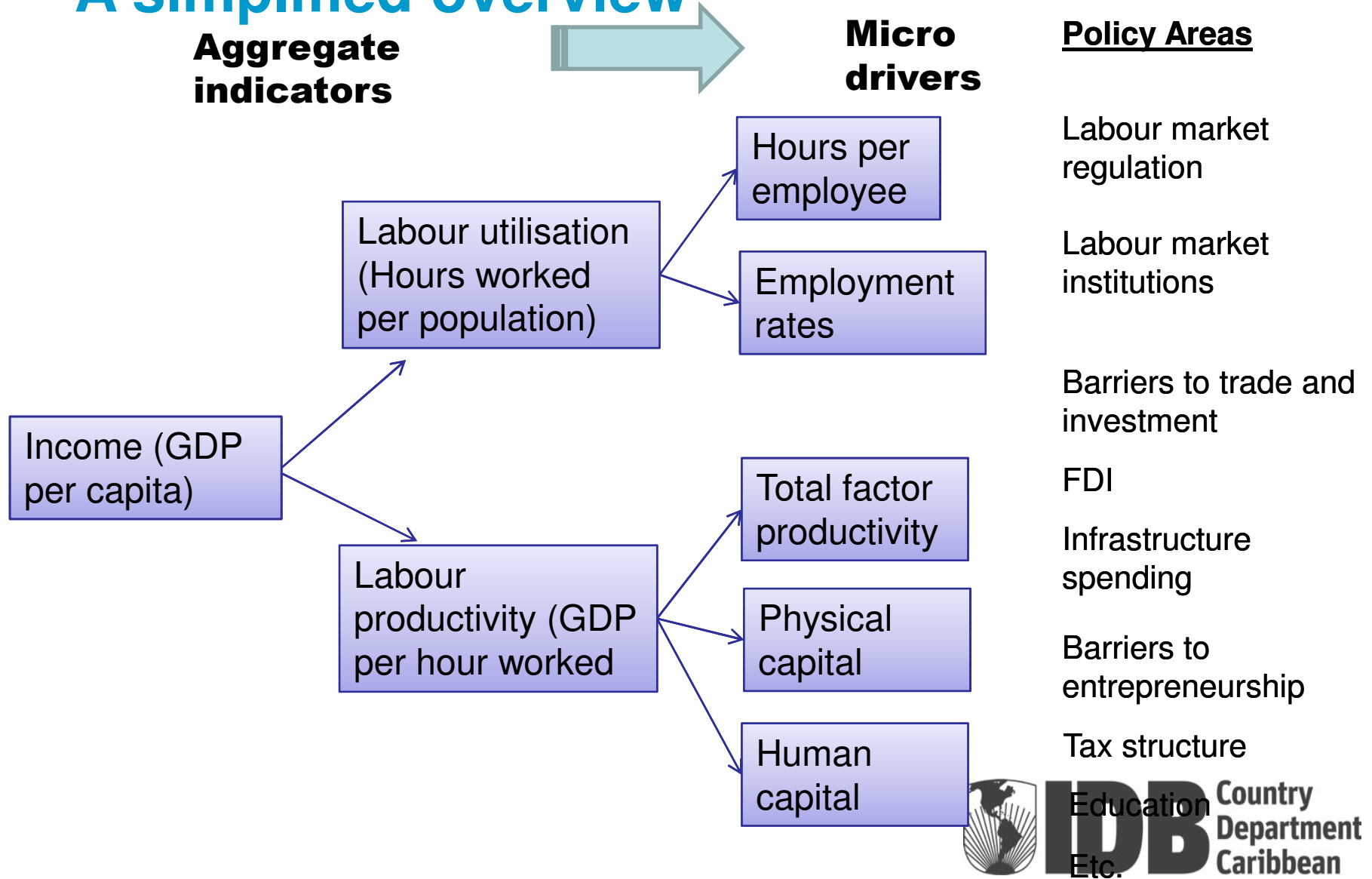
Infrastructure spending



IDB Country
Department
Caribbean

What are the policy indicators?

A simplified overview



Matching Process

Performance Indicators

GDP per worker 2010
(levels and growth)

Total investment (levels
and growth)

Employment to
population ratio

FDI (% GDP)

Labour Force by level
of education

Participation % of age
15 and older (by sex)

⋮

Matching process



Policy Indicators

Secondary education
enrolment

Business costs of crime and
violence (s)

Quality of electricity supply
(s)

Quality of roads (s)

Brain drain (s)

Company spending on R&D
(s)

Total tax rate (% profit)

Time to Start a Business
(days)

Criteria for deciding which policy indicators to keep: from OECD to the Caribbean

- 1) Has the economic literature shown the indicator to be relevant for growth with adaptation to the Caribbean?
- 2) Is the interpretation still applicable, despite differences in structure between OECD and Caribbean countries?
- 3) What is the current availability of data required to appropriately measure indicator?
- 4) Does the indicator need to be modified to be relevant for the Caribbean?

For example, *internet access in schools* and *brain drain* affect labor productivity; *Quality of port infrastructure*, *electricity cost per kwh* and *business cost of crime* affect business environment.

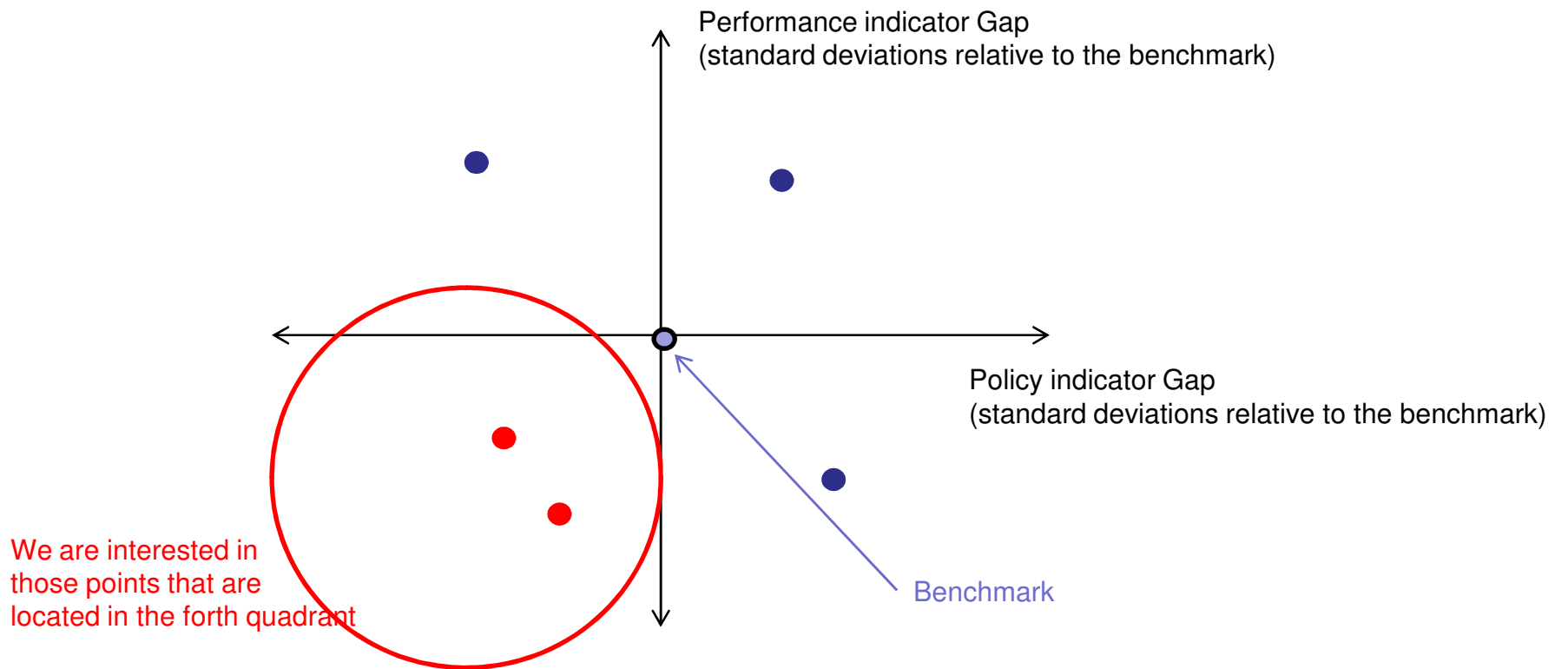
Benchmarking has become more prolific, but there are risks

- **Policy transfer concerns**: will the same policies be successful in a country with a different institutional structure and political reality?
- Policy makers may use it as "**scorecard maximizing**": (worry about rank rather than reform itself).
- Methodological weaknesses: Concerns about the data used for **construction of indicators** of economic performance. There are issues of comparability, reliability and availability of indicators
- Largest problem for the Caribbean seems to be finding the empirical evidence linking policy indicators to performance. Most of the work is 'derived'.

Identification (results)

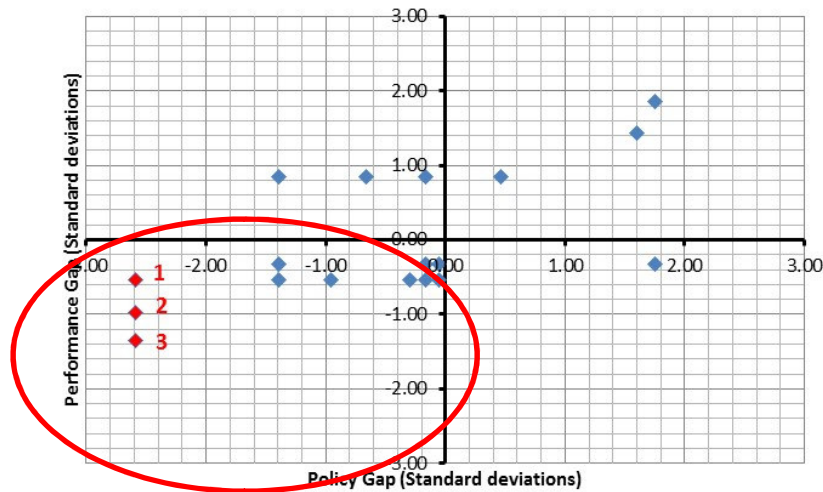
Identification: an example

Graph 6. Quadrant graph (normalized indicators)



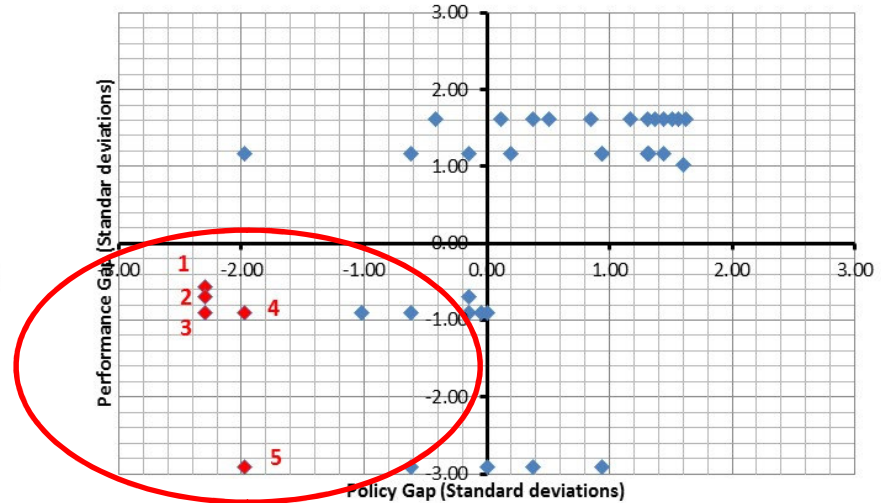
Identification (Tourism Dependent Countries)

The Bahamas



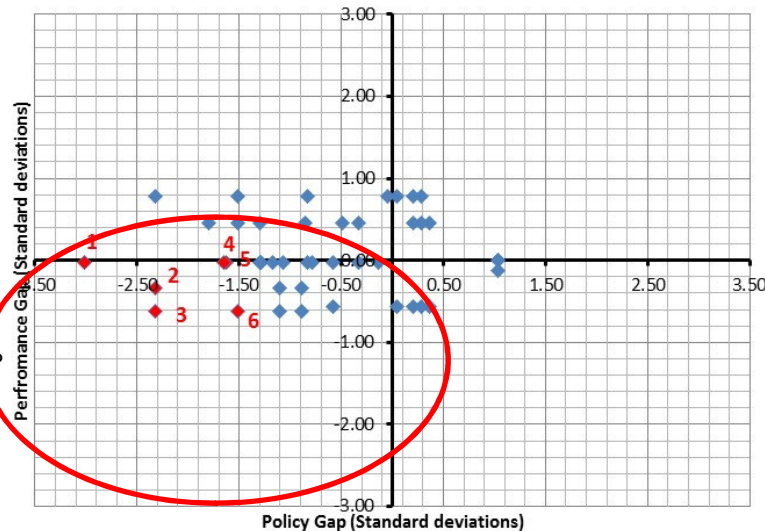
Note: Numbers correspond to the following ordered pairs: 1.- (Total Tax rate; Total investment growth in 10 years) / 2.- (Total Tax rate; Per worker GDP growth in 10 years) / 3.- (Total Tax rate; Per worker GDP growth in 5 years)

Barbados



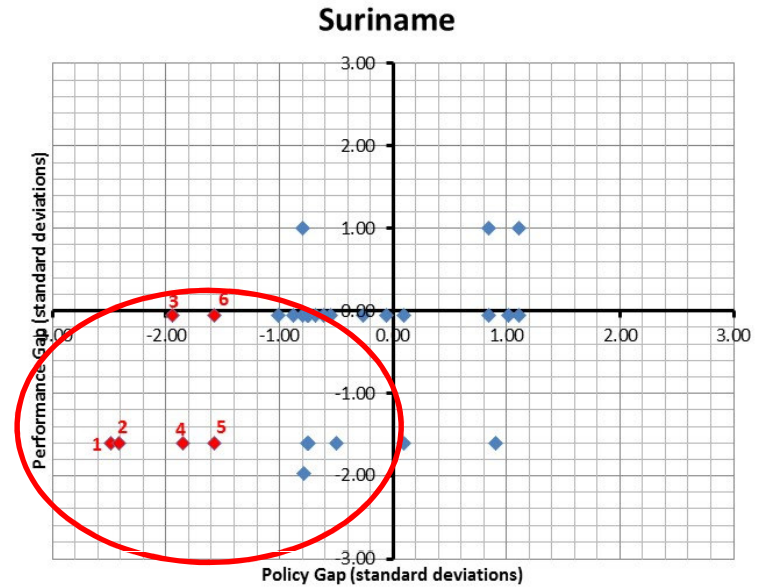
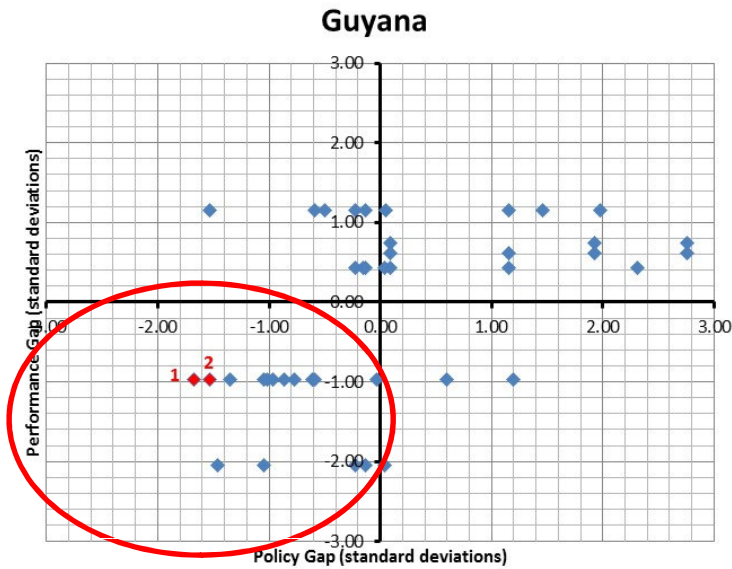
Note: Numbers correspond to the following ordered pairs: 1.- (Total Tax rate; Per worker GDP growth in 10 years) / 2.- (Total Tax rate; Per worker GDP growth in 5 years) / 3.- (Total Tax rate; Total investment growth in 10 years) / 4.- (Time to register a property; Total investment growth in 10 years) / 5.- (Time to register a property; Total investment-to-GDP ratio in 20 years)

Jamaica



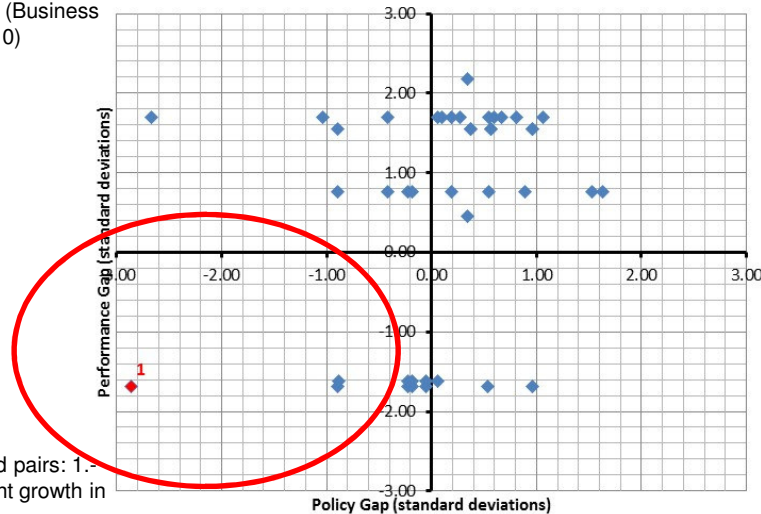
Note: Numbers correspond to the following ordered pairs: 1.- (Business costs of crime and violence; GDP per worker 2010) / 2.- (Total Tax rate; Per worker GDP growth in 10 years) / 3.- (Total Tax rate; Per worker GDP growth in 5 years) / 4.- (Quality of math and science education; GDP per worker 2010) / 5.- (Fixed broadband Internet subscriptions; GDP per worker 2010) / 6.- (Company spending on R&D; Per worker GDP growth in 5 years)

Identification (Commodity Exporters)



Note: Numbers correspond to the following ordered pairs: 1.- (Quality of electricity; GDP per worker 2010) / 2.- (Business costs of crime and violence; GDP per worker 2010)

T&T



Note: Numbers correspond to the following ordered pairs: 1.- (Procedures to Start a Business; FDI growth in 10 years) / 2.- (Time to register a Property, FDI growth in 10 years) / 3.- (Internet access in schools; GDP per worker 2010) / 4.- (Business impact of rules on FDI; FDI (% GDP) in 10 years) / 5.- (Company spending on R&D; FDI (% GDP) in 10 years) / 6.- (Company spending on R&D; Per worker GDP growth in 5 years)

Note: Numbers correspond to the following ordered pairs: 1.- (Procedures to register a Property; Total investment growth in 10 years)

Conclusion

- The methodology focus on key factors that contribute to real GDP per capita, such as labor productivity, labor utilization, the business environment, and the micro-drivers associated with each.
- By assembling and disseminating all available information on labor and the business environment that influence productivity, the methodology could promote knowledge-sharing and sharpen the analysis of differentials in productivity and real incomes within the Caribbean region.
- The contribution of the exercise will depend on the extent to which concerns in the literature about the application of benchmarking can be addressed.
- The benchmarking exercise, once established, would be done in consultation with member countries and institutions such as The Caribbean Growth Forum, CARICOM, the Caribbean Development Bank, and the University of West Indies.

ANNEX

Jamaica – Economic Policy Reforms for Growth

Background

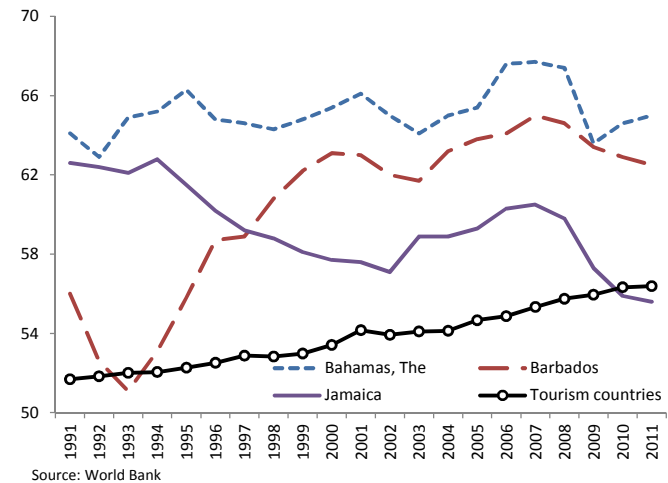
- Economic activity is expected to grow 0.6 percent after having remained almost constant in 2012 and grown 1.5 percent in 2011.
- Unemployment rate has increased to 16.3 percent at the end of April 2013 as a consequence of an important increase in the labor force. Inflation reached 9.7 percent in July 2013.
- Fiscal situation is still fragile, but important improvements have been achieved. Fiscal deficit is expected to decline to 1 percent in 2013 from 4 percent in 2012 and 6.4 percent in 2011. Furthermore, the debt to GDP ratio is also expected to decline to 143 percent in this year and to 110 percent in 2018.
- Over the medium term, the GDP is expected to grow 2.0 percent in average from 2014 to 2018.

Jamaica – Economic Policy Reforms for Growth

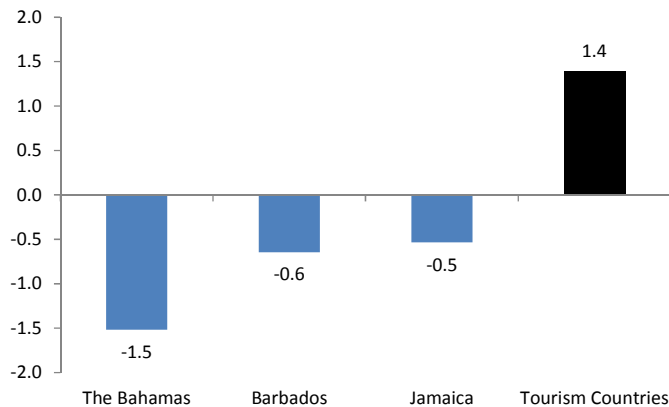
Performance

- Jamaica has the lowest level of number of people participating in the workplace, and almost a continued decline since 1991, in sharp contrast to its regional peers and benchmark.
- Income levels are still low relative to regional peers and, most importantly, since 1998 Jamaica's income has reached lower levels than those of its benchmark.
- Labor productivity has decreased 0.5 percent in the last 5 years, in line with regional peers, but in contrast to the growth achieved by the benchmark.

Employment to population ratio, 15+, total (%)



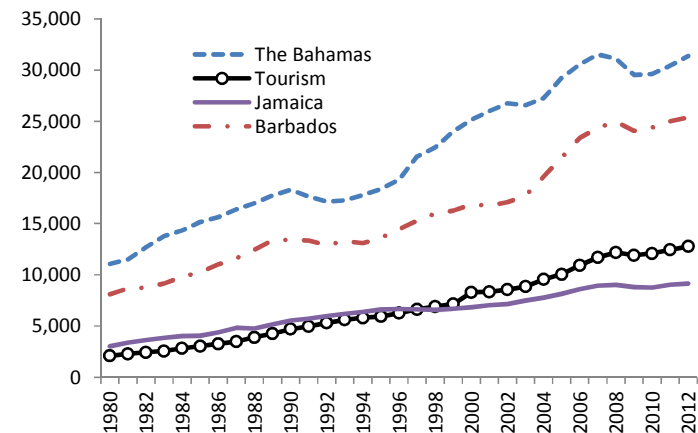
GDP per worker (Growth 2002-11)



Source: Penn World Table 8.0

Note: Workers are defined as persons aged 15 years and over who performed work.

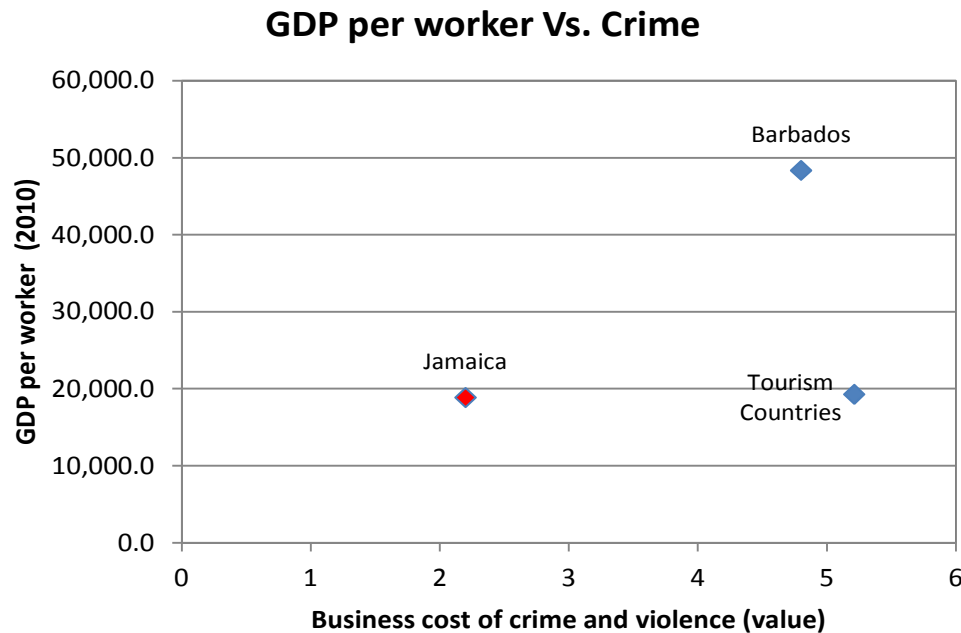
GDP per capita
(Current international dollar - PPP)



Jamaica – Priorities supported by indicators

Priorities

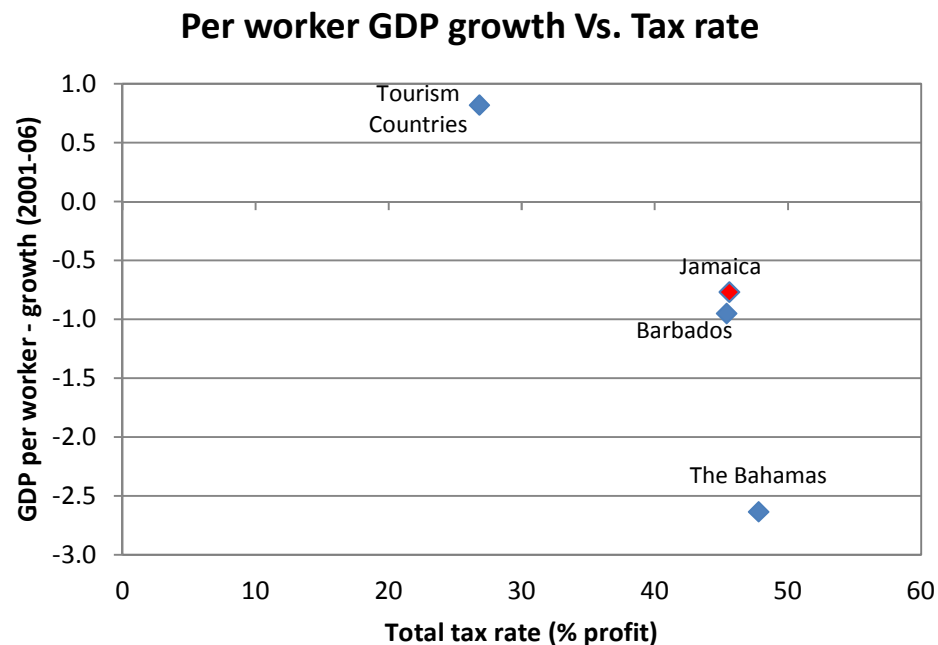
- **Reduce the incidence of violence and crime to improve business environment.** High business costs of crime and violence constitute an important constraint for business environment and therefore for labor productivity. In the region, Jamaica has the highest (i.e. worse) indicator.



Jamaica – Priorities supported by indicators

Priorities

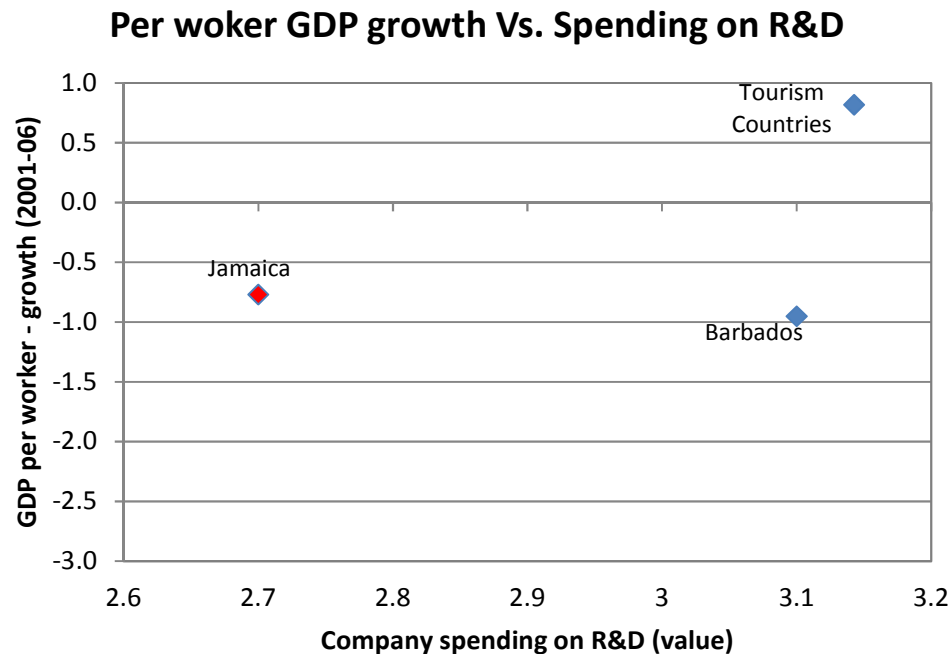
- **Tax structure.** Tax rates are among the highest in the region and are significantly higher than those of the benchmark country-group (the difference is almost 19 percentage points). Labor productivity growth could be boosted by setting up a more progressive tax system



Jamaica – Priorities supported by indicators

Priorities

- **Low spending in R&D.** Jamaica shows one of the lowest values regarding the level of spending on R&D in companies over the region. It is known that Research and Development constitutes one of the main determinants of labor productivity among countries.





Thank you

Inter-American Development Bank / www.iadb.org

