

Water supply and sanitation in Latin America

(moving toward sustainability following two decades of reforms)



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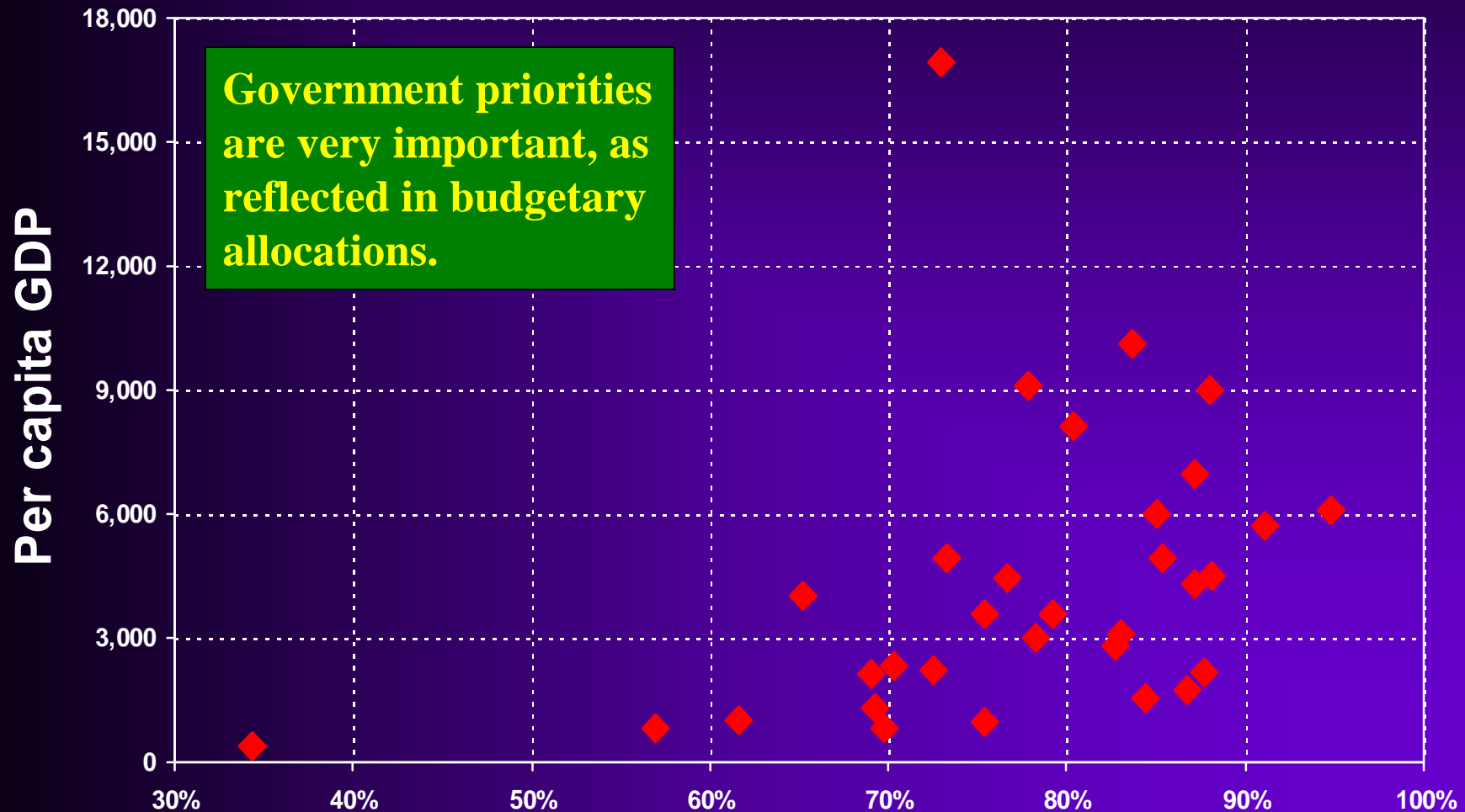
By Andrei S. Jouravlev

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Introduction

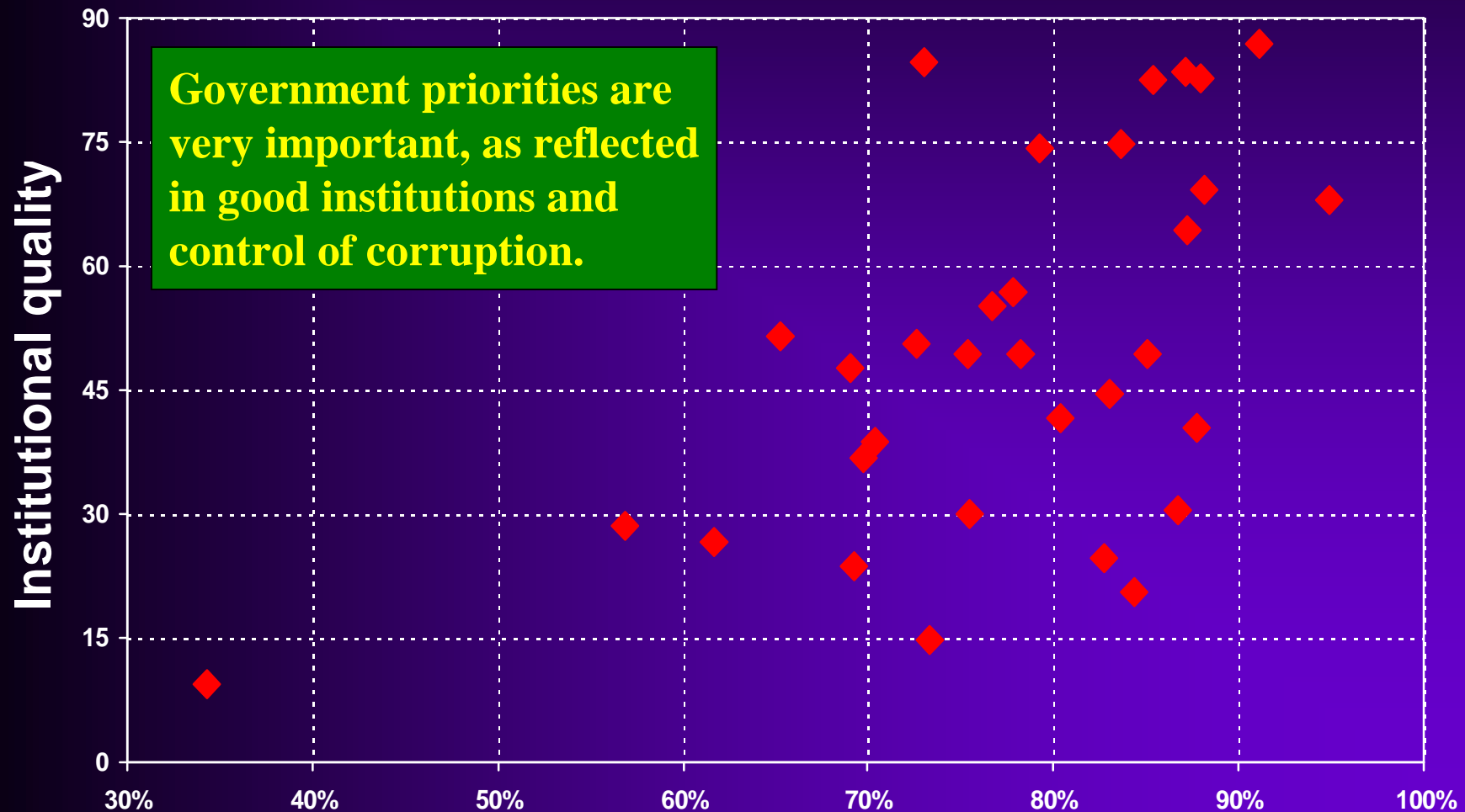
- Coverage levels in the region are reasonable (91% for water supply and 77% for sanitation), but:
 - some 50 million persons lack access to water supply and almost 130 million to sanitation;
 - wastewaters from 370 million urban inhabitants (86%) are discharged without any treatment; and
 - poor service quality and deficient infrastructure.
- Over the past two decades, this sector has been subjected to extensive reforms in most countries:
 - many common features, but very disparate results.

Coverage and development



Correlation = 0.35 (per capita gross domestic product)

Coverage and institutions



Correlation = 0.56 (0.60 for control of corruption)

Institutional structure

- The contents of the reforms:
 - Explicit institutional separation between the functions:
 - policy formulation, regulation, and provision of services.
- What has been achieved:
 - Many countries have created independent regulators:
 - 50% of the countries (13% in other developing regions).
 - Regulation has been largely ineffective, but
 - There has been considerable progress, as in Chile and Argentina, in comparison with the original very weak situation.
 - Association of Regulatory Agencies for Water Supply and Sanitation Services in the Americas (ADERASA) (2001).

What are the main problems?

- Independent regulators:
 - Most of them are weak, lack real authority, suffer from political interference, have inadequate resources and operate within ineffective regulatory frameworks.
- Service providers (virtually all public):
 - show serious operating inefficiencies and a precarious financial situation; political criteria predominate in their administration (staff selection, rate-setting, etc.).
- Objective of the reforms:
 - to promote efficiency through economic incentives, but they are not (always) effective with public provision.

What have we learned?

- **Private service provision:**
 - This institutional separation is essential.
 - The definition of the regulatory framework and the institutional establishment of the responsible entity, must precede the process of privatization; if this is not done, reforms may be unstable and may result in unjustified transfers.
- **Public service provision:**
 - This institutional separation is highly recommendable.
 - Regulatory controls common under private provision must be complemented by objective, personal rather than institutional, responsibility of system administration for efficiency, competitiveness and transparency in service provision.

Industrial structure

- The contents of the reforms:
 - Most countries have decentralized service provision, often to the lowest appropriate level (municipal).
- What has been achieved:
 - There are isolated examples of good service provision:
 - limited to large, high-income, politically important cities that have succeeded in creating autonomous companies with a stable, professional and non-political management.
 - But, in general, decentralization has generated serious problems (and aggravated existing ones), fragmenting the industry and compromising its viability.

What are the main problems?

- Loss of significant economies of scale:
 - Economies of scale in service provision are not exhausted to at least 500 thousand (and probably much more) persons served.
- System operation and administration based on political rather than technical criteria.
- It is impossible to effectively regulate hundreds of highly heterogeneous service providers.
- Reduced possibilities for cross subsidies:
 - decentralization reduces the size of service areas and makes them more homogenous.
- Lack of incentives for efficient water use, water pollution control and watershed management.

What have we learned?

- Rather than a problem of radical alternatives, it is a question of structuring balanced systems:
 - Appropriate industrial structure depends on technical considerations, economies of scale and scope, and technical and financial viability.
 - It is also important:
 - to separate technical management of decentralized activities from political influences;
 - to preserve a residual capacity at the central level, including a capacity for intervention in cases of mismanagement; and
 - to define the obligations of the decentralized bodies and make their administration personally responsible for their violation.

Private sector participation

- The contents of the reforms:
 - In the 1990s, there was much enthusiasm for private participation in water supply and sanitation companies.
- What has been achieved:
 - Only two countries have privatized on a massive scale:
 - **Argentina:** many concessions proved to be unsustainable, at least in their original formulation, and have failed.
 - **Chile:** has been more successful (all state-owned companies were privatized and there is significant private investment).
 - **Others:** many (40%) have isolated examples of private participation, but these are more the exception than the rule.

What are the main problems?

- There have been many conflicts and failures:
 - 75% of contracts were renegotiated:
 - renegotiations were usually (66%) initiated by operator; and
 - renegotiations usually favoured the operator (reduction of investment obligations in 62% of cases, delays in investment obligations targets in 69%, and tariff increases in 62%).
- With very limited exceptions, little real benefits:
 - there has been a widespread failure to comply with contractual obligations; there have been more promises of future investment than real expansion; and connection rates had the same tendency in areas with and without private participation.

What have we learned?

- Private participation does not miraculously make unprofitable operations profitable.
- When has private participation been successful:
 - Reasonably efficient and profitable firms are privatized:
 - good information about the situation of the system facilitates regulation and reduces conflicts and contract renegotiations.
 - With high levels of water and sewerage coverage:
 - since new investment is needed basically only for wastewater treatment, expansion costs are much easier to estimate.
 - There are national sources of private financing:
 - manageable exchange risk.

Regulatory frameworks

- The water supply and sewerage industry is a classic case of a local natural monopoly:
 - “The price of monopoly is upon every occasion the highest which can be got” (Adam Smith, 1776).
 - “Monopoly ... is a great enemy to good management”.
 - Public or private ownership does not change the situation much:
 - these services are easily capturable either by bureaucracy, politicians, unions, investors or special interest groups.
 - So, incentives for allocative and productive efficiency depend critically on the regulatory framework adopted.

What are the main problems?

- Many countries adopted very weak regulatory frameworks:
 - An ideological view of governments as inevitably inefficient and corrupt and whose powers must be limited.
 - Regulatory frameworks were often formulated:
 - at a time when the need to ensure efficient regulation was a secondary priority; and
 - in a context of weak or poor institutions and problematic State finances.
 - The mistaken belief:
 - that modern regulatory systems (price-caps, benchmarking, etc.) have low information needs; and
 - that competition (competition for the market, direct competition or contestable markets) will reduce the need for regulation in this sector.

What have we learned?

- Both public and private companies need adequate and strict regulation, based on the principles of:
 - Fair and reasonable rate-of-return.
 - Good faith and due diligence.
 - Duty of efficiency, and periodic transfer of efficiency improvements to customers.
 - Adequate access to information, with emphasis on regulatory accounting and control of transfer prices.
 - **How serious governments are about economic efficiency and social equity is revealed by how serious they are about regulation.**

Tariffs and subsidies

- In most countries, tariffs do not cover costs:
 - Information on tariffs is very limited, but in large cities:
 - residential tariffs fall short of cost recovery by around 30%;
 - about 46% of companies achieve some capital cost recovery.
 - Inefficient management and lack of investment.
 - There has been some (limited) progress towards more realistic tariffs:
 - residential tariffs have been increasing in nominal terms at an annual rate of 8%, but only by less than 1% in real terms.
 - There has also been some (limited) progress in the creation of subsidy systems for the poor.

What are the main problems?

- Rate increases are limited:
 - by low payment capacity:
 - the poorest (20%) often pay from 5% to 11% of their income for “official” water services; also
 - by low payment culture;
 - by high political sensitivity;
 - by the absence of effective subsidy systems; and
 - by high service costs:
 - often due to inefficiency, high investment needs, high labour costs, etc.

Poor

• % of the region's population	39
• Millions of inhabitants	205

Extremely poor

• % of the region's population	15
• Millions of inhabitants	79

What have we learned?

- Obviously, there is a need to bring tariffs to cost recovery level, but in order to make this possible:
 - It is better to have high revenue collection rates even with subsidized tariffs than low revenue collection rates with full cost recovery tariffs.
 - Services are costly and those who lack connections are mostly poor, so public financing is essential.
 - The creation of effective subsidy systems that avoid as far as practicable cross-subsidies and that guarantee the low-income groups a basic minimum supply.
 - Efficiency reduces costs and makes services affordable.

Priorities for the future

- To strengthen regulatory frameworks:
 - Emphasis on efficiency and sustainability.
 - Access to information and consumers' participation.
 - To adapt regulatory practices to the specific requirements of state-owned service providers.
 - Based on empirical experience, rather than abstract theories.
- To improve the financial situation of the sector:
 - Effective subsidy systems for the poor.
 - Budgetary allocations, particularly for service network expansion.
- To consolidate the industrial structure of the sector:
 - To realize economies of scale and scope.

Priorities for the future

- To improve the decision-making process:
 - To analyze expansion options, and structure them in such a way that they do not become a burden on the economy and citizens.
 - To analyze the effects of international investment protection agreements on the national capacity to regulate public services:
 - Investment disputes are settled in international arbitration tribunals: the reasons for concern include the secret nature of procedures, the lack of obligatory precedent, the absence of principles of public interest, and the fact that the international arbitration tribunals are *ad hoc* bodies comprised of members paid by the parties involved.
 - The last two decades have demonstrated the significant impact of macroeconomic policies on the sustainability of public services, and these effects should not be ignored by decision-makers.

Thank you very much for your attention!



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