1. Introduction

...some light on a way to measure telecommunications services in developing countries. Such a method, combined with the appropriate cost structure of revenue collected from telecommunications services, can provide a reliable indicator of the economic infrastructure of the country. This indicator can be used to assess the impact of telecommunications on economic development. The paper develops a methodology to measure the economic infrastructure of a country using telecommunications services. The methodology is applied to a sample of developing countries, and the results are compared with those of other studies on economic development.

Abstract

Felipe Moraende

A METHODOLOGICAL NOTE

TELECOMMUNICATIONS IMPROVE SOCIAL WELFARE?

Does deregulation of quality standards in telecommunications improve social welfare?

Retorno de la segunda economía, vol. 5, no. 1, pp. 69-74 (julio 1990)
where \( \sigma_0 \) is the quantity demanded for a minute of communication in the cost-effectiveness function.

\[
\sigma_0 = \left( \frac{\sigma_{0w} - \sigma_{0w0}}{\sigma_0} \right) T + \left( \frac{\sigma_{0w} - \sigma_{0w0}}{\sigma_0} \right) + 1 \]
\]

For the parameter \( \sigma_0 \), which is the average value of \( \sigma_0 \) and \( T \), we have the following:

\[
\sigma_0 \approx \left( \frac{\sigma_{0w} - \sigma_{0w0}}{\sigma_0} \right) T + \left( \frac{\sigma_{0w} - \sigma_{0w0}}{\sigma_0} \right) + 1
\]

This represents the change in the composition of \( \sigma_0 \) and \( T \), which impacts the overall cost-effectiveness of the system.

\[
\text{COMBINATION OF } \sigma_0 \text{ AND } T \text{ THAT INDUCE NEW SUGGESTIONS AFTER A Q \text{ PERIOD}}
\]

\[
\text{DECREASE OF } \sigma_0 \text{ AND } T \text{ THAT INDUCE NEW SUGGESTIONS AFTER A Q \text{ PERIOD}}
\]

\[
\text{FIGURE 1}
\]

The problem in question involves the determination of the optimal composition of \( \sigma_0 \) and \( T \) for a given system, considering the trade-off between the efficiency and cost-effectiveness of the system. The figures and equations illustrate the relationship between these variables and the overall performance of the system.

\[
\sigma_0 = \left( \frac{\sigma_{0w} - \sigma_{0w0}}{\sigma_0} \right) T + \left( \frac{\sigma_{0w} - \sigma_{0w0}}{\sigma_0} \right) + 1
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\text{FIGURE 1}
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The problem in question involves the determination of the optimal composition of \( \sigma_0 \) and \( T \) for a given system, considering the trade-off between the efficiency and cost-effectiveness of the system. The figures and equations illustrate the relationship between these variables and the overall performance of the system.
Finally, there is, as usual, the potential of a welfare gain even for feasible combinations above the line given by restriction (6') if some type of cross compensation (tax-subsidy) scheme might be put in place.

**Final Remarks**

This note has tried to design a simple methodology to assess under what reductions in telephone communication prices, a worsening in technical quality could imply a social welfare improvement. Doing so, we have attempted to contribute to the issue of high capital costs of telephone expansion, specially in developing countries.

An extension of this proposition should take into account residential demand more explicitly and also more complex price schemes (like charges per call and differences in prices depending upon the time of the day, for example). A formal treatment of the technical and economical feasibility of price reductions (accruing for instance to economies of scale) would be also a necessary complement.

**Notes**

1. Data from Saunders et al. (1983).
2. We are not taking into account residential demand for telephone services, although the model could be easily adapted such that it generates that demand by assuming the household as a leisure producer and where leisure production has telephone communication as an input. This will become evident below.
3. This could be the case of the firm’s sales department, where the number of telephone communication minutes is proportional to the sale effort and, thus, to man-minutes available.
4. We will indistinctly use $db$ and $b$, where $\delta a = \beta b$.
5. This notion of total cost excludes the cost of capital.
6. We are assuming that the same price per minute of communication, $w_{min}$, is charged both in the public booth and to the private line.
7. Remember that we are not considering residential lines, at least explicitly.

**References**


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**BRASIL 1986-1989: NOTAS SOBRE LAS POLITICAS DE ESTABILIZACIÓN**

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**Abstract:**

In this note, we make a critical review of the Brazilian experience with heterodox stabilization programs (Cruzado; Bresser and Venano), emphasizing those factors which were more important to explain the failure of these programs. The basic insight is that a balanced combination of orthodoxy with heterodox policies does not guarantee the success of these plans because they do not consider the stock financial disequilibrium of the public sector.

**A. Introducción**

Este trabajo se propone revisar críticamente los planes de estabilización llevados a cabo en Brasil durante el período 1986-89, y discutir los factores que han dificultado su éxito en controlar la inflación.

Durante el período 1967-85 la economía brasileña experimentó sucesivos aumentos del nivel de precios. Desde 1967 a 1973 la tasa media anual de inflación fue alrededor de 20 por ciento. Con las presiones de demanda y el shock de los precios del petróleo, en el período 1974-78 la tasa media anual de inflación se duplicó, llegando a un nivel cercano al 40 por ciento. En 1979 nuevos shocks elevaron la inflación a tasas próximas al 100 por ciento al año, nivel que permaneció durante 1980-82. Luego, en 1983, la tasa de inflación nuevamente se duplicó, alcanzando un 200 por ciento, nivel que se mantuvo hasta 1985. En definitiva, el comportamiento de la inflación en Brasil hasta 1985 se puede describir como una sucesión de aumentos y relativa estabilidad a esos nuevos niveles.

* Que embalsamos los valiosos comentarios de un árbitro anónimo, de Dominique Lachée, y de los investigadores del FREALC/OIT, donde se presentó una versión preliminar de este hecho. También agradecemos a Juan Carlos Landa, quien nos facilitó información sobre el sector público brasileño. Como siempre, la responsabilidad final del trabajo recae exclusivamente en los autores.