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RESEARCH SUMMARY

Do High International Telecom Rates Buy Telecom Sector Growth? An Empirical Investigation of the Sender-Pays Rule

International calls typically are facilitated by multiple telecommunications companies at once, each of which must specially develop its network to send and receive data internationally. These data are integral for services such as phone calls and internet, which customers buy through their respective telecom companies. The former service—international phone calls—operates according to a sender-pays rule. Information exchanged on the internet, however, is not priced at all—a system called *peering*.

In 2012, during its World Conference on International Telecommunications, the United Nations debated extending the sender-pays system to internet service. Some telecom companies and governments supported the proposal, arguing that additional revenues would flow back into the development of infrastructure.

In "Do High International Telecom Rates Buy Telecom Sector Growth? An Empirical Investigation of the Sender-Pays Rule," Eli Dourado examines the effect of increased fees on growth in the telecom industry. He finds that higher fees do not support growth and in fact are associated with slower growth in the telecom sector. These results suggest that a sender-pays rule would not foster growth in internet infrastructure as intended.

KEY HIGHLIGHTS

Study Design

Data on international calling rates from the Federal Communications Commission, GDP data, and other telecom data from World Bank World Development Indicators are used to study whether higher telecommunications rates helped or harmed growth in the period from 1992 to 2010. The study uses these data to explore possible results if the same rates were applied to the internet.

Higher Earnings for Telecom Companies?

Examining the data using regression analysis, the study finds the following:

- Higher telecom rates are correlated with fewer mobile subscriptions, telephone lines, internet users, and fixed broadband subscribers in general, when controlling for the GDP or income of the country.
- Region may have an impact on the cost of telecom infrastructure expansion, since, for example, communicating between the islands of Oceania may be more difficult than communicating across the land of northern Africa. But when controlling for region and income, higher telecom rates are still significantly correlated with lower numbers of internet users and fixed broadband subscribers.

- Even when controlling for income, region, and situations in which rates are temporarily held high in order to increase available funds for investment (then lowered once the investment has been made), high telecom rates still correlate with slowed infrastructure growth.

No Observable Increase in Development or Infrastructure

The assertion that extending sender-pays rules will create revenues and spur development deserves closer examination. The data contradict this claim and show that high rates slow growth. Companies are likely not using additional revenue for the purpose of infrastructure development.

CONCLUSION

Higher telecom rates do not lead to development, and sender-pays rules do not yield the benefits claimed by their proponents. These rates should not be applied to the internet. Instead, other methods of financing would work better.

In order to develop their telecom infrastructure, governments could rely on private investment or specially earmarked foreign aid. Governments should also concentrate mainly on domestic sources for revenue, rather than collecting rates from foreign companies, which are not as interested in the country and its development as domestic companies.