

Universal Service Policies as Wealth Redistribution

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This article, which offers a critical reassessment of the underlying rationale for universal service policies, argues that public policies designed to promote universal telecommunications access are simply a form of wealth redistribution. By reconceptualizing universal service subsidies in this way, one can obtain a more realistic assessment of the proper scope and limits of universal service policies. Universal service policies, at best, can play a supplementary role. Economic reforms that encourage investment and promote robust competition are more fundamental to the development of an ubiquitous infrastructure than government subsidies. The redistribution of wealth via telecommunications can ameliorate inequalities, but it cannot eliminate their causes, and advocates should stop pretending that it can. Furthermore, universal service advocates must become more aware of the political and economic risks and pitfalls that are inherent in the process of wealth redistribution.

The purpose of this article is to encourage individuals, stakeholder groups, and interested organizations to scale down the rhetoric and expectations associated with universal service policy. "Universal service policies" refer to those regulatory and fiscal measures that governments undertake to make sure that as many people as possible are connected to the telecommunications infrastructure.

The article makes two essential arguments. First, universal service policy is about redistributing wealth. At best, redistribution consists of taking money away from those who can easily afford it, and giving it to those who would fare really badly without wealth—hopefully, without undermining the basic incentive structure of society. At worst, the money can flow in the opposite direction or create perverse and counterproductive incentives. At any rate, redistributing wealth to promote more universal access is

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not a substitute for the kind of economic growth that can finance the construction of a ubiquitous infrastructure. This is not a way of fostering the growth of an information society. It is not an economic development plan, nor is it a way of altering the basic opportunity structure of society. It is simply a way of making things slightly more balanced. Public discourse about universal service policy will become more focused and rational when its advocates explicitly accept this fact.

The second argument is to call attention to the fact that wealth redistribution is a political process. Universal service advocates need to become a bit more sophisticated about the constraints and limits of politically mandated wealth redistribution. Once the essential nature of universal service policy as a form of wealth redistribution is accepted, some fairly clear guidelines emerge about what universal service policies can reasonably be expected to do—and not to do—and what pitfalls to avoid.

WEALTH AND TELECOMMUNICATIONS ACCESS

The subject of wealth and its relationship to telecommunications penetration is a good beginning point from which to launch the article. The strong positive correlation between per capita wealth and the geographic and social penetration of telecommunication and information services has been evident for decades.¹ Rich societies have the highest levels of telephone penetration and poor societies have the lowest. Wealth causes penetration levels to approach universal levels, not the other way around. Although some econometric studies suggest that economic growth and telecommunications growth are related in a cycle of mutual causation² that statistical relationship only exists in historical data of already-developed economies such as the United States. The data suggest that a society with an expanding economy also needs to expand its telecommunications infrastructure, and that if the infrastructure expansion does not keep pace with the growth of the economy, growth and wealth-creation will be impeded.

It is implausible, to say the least, to propose that it is possible to reverse the causal direction. Haiti or Burma cannot transform themselves into wealthy societies simply by building an extensive, universal telecommunications network. Where would the countries get the capital to build it? Even if some generous international agency simply donated the billions of dollars required (a not very realistic scenario), the mere presence of an advanced physical infrastructure would mean little. The infrastructure must be efficiently and organically related to the economic and social needs of the country. The investments put into the infrastructure must generate a payback quickly enough to generate a self-sustaining cycle of growth. The residents of the country must know how to operate, use, and maintain the services in a way that actively contributes to their competitive advantage in the domestic and global economy. Otherwise, the infrastructure is nothing but an inert mass of wires, plastic, and metal.

In short, the most broadly effective universal service policies are simply to grow household wealth and to build an open, competitive economy that is able to supply information goods and services efficiently at prices that are affordable to ever larger numbers of people. Everything else is secondary.

REDISTRIBUTION

Most universal service advocates would not be content to let growing household wealth produce higher aggregate levels of technology diffusion, however. They would point out that, even in advanced economies with high levels of penetration, there are major inequalities in the distribution of information goods and services.³ Quite apart from household income disparities, there are also major differences in the cost of extending a network to different geographic areas of a country. Left to its own devices, a market economy would probably reflect those cost disparities, to the detriment of the people living there. Nearly every advanced economy, and most developing ones, engage in some form of hidden cross-subsidy or explicit wealth redistribution in order to reduce or eliminate the cost disparity between rural and urban areas.

The above discussion reveals that contemporary universal service policies are really about the proper scope of the redistribution of wealth. Such policies are designed to reduce or eliminate access disparities among different groups in the same society. Why belabor this point? Because all too often, universal service advocates are unwilling to acknowledge this simple fact and understand its implications. Rather, they:

- Concoct elaborate and inflated claims for universal service policies; for example, that they will magically ameliorate the differences between rich and poor or stem the economic decline of rural areas.
- Invent woefully inaccurate historical myths about the contribution of government policies to infrastructure development.
- Ignore persistently the fact that, throughout the world, most of the work of extending new communications technologies to the broad population has been done by commercial investors, not by redistributionist policies.

The above lead to the second part of the argument. By explicitly identifying universal service policy as a form of wealth redistribution, a much clearer mental framework is created for the definition and assessment of universal service policies. That framework is summarized as follows:

- First, universal service policies, as forms of wealth redistribution, can only make marginal contributions to the distribution of telecom resources;
- Second, major wealth-redistribution policies must be based on political bargains that reflect the perceived self-interest of major social powers;
- Third, wealth redistribution is most effective when it is narrow and targeted, and most fair when its costs are not hidden; and
- Fourth, it makes no sense to apply universal service policies to new or emerging technologies.

REDISTRIBUTION POLICIES ARE ONLY RELEVANT AT THE MARGIN

Universal service policies can only ameliorate inequalities at the margin. Employed as a supplement to normal commercial development, they may increase penetration by a few percentage points or extend geographic distribution a bit more than it would have been

otherwise. No society has ever built an entire infrastructure on the basis of redistributionist policies, however. Universal service policies can be used to supplement a market-oriented, business-driven infrastructure development strategy, but the real work of development is going to be done by commercial interests and follow commercial imperatives. This was certainly the case in the United States. The Rural Electrification Administration helped to finance telephone exchanges in remote areas, but its overall impact on rural America was small compared to the massive, unsubsidized extension of the public network that took place in the early 1900s because of the competitive struggle between independent telephone companies and the Bell system.⁴ The regulatory cross-subsidies that kept residential telephone rates artificially low from 1965 on also had a marginal impact on the overall rate of telephone penetration. They coincide in time with the growth of household penetration from 85% to 92%, but penetration was growing rapidly before they were instituted and continued to grow as the Federal Communications Commission (FCC) phased them out.⁵

The same is true of Internet access. Five years ago, some of the more aggressive advocates of universal service-oriented intervention were eager to include Internet access in a list of subsidized services. Since then, the commercial Internet Service Provider (ISP) industry in the United States, driven entirely by normal business incentives, has done an impressive job of delivering toll-free dial-up Internet access to almost every area in the United States. An extensive study by Shane Greenstein showed that only 12 percent of the U.S. population lives in counties with only one or no ISP.⁶ It remains to be seen whether this progress will continue or whether there will be some residual pockets of the country that require some sort of subsidy. Either way, the contribution of universal service policy to the spread of the Internet will be marginal compared to the impetus given by industry.

WEALTH REDISTRIBUTION IS BASED ON POLITICAL BARGAINS

Even when redistribution of wealth seems to be justified, it is wise to keep in mind its limitations. One of those limitations is the important fact that wealth redistribution by the state is never a pure expression of altruism, but emerges from a political process. In order to utilize the government's power to reshuffle money, political coalitions must be formed and bargains made. Such political processes are no more exempt from self-interest than the pursuit of profit in the commercial world. Granted, political processes structure self-interested interactions in a very different way than do market transactions, but one is still dealing with self-interest. Any universal service program of a significant scale is going to bear the imprints of local telephone monopolies, long-distance companies, educational institutions, rural politicians, and all the other "usual suspect" lobbying groups. That point has been made by Harmeet Sawhney in an essay comparing the development of universalistic objectives in education to universal service in telecommunications.⁷ Sawhney showed that the concept of universal public education was little more than that—a concept—until a coalition of societal groups with very different interests converged around the idea. Some of the objectives of the coalition, such as the idea of "Americanizing" immigrants and the need to keep children out of the labor market, no longer seem so noble, but they were essential to the realization of the program.

Another constraint on policy is that the political bargains that underlay redistribution can be difficult for a society to extricate itself from. The political bargains that sustain the program can survive long after the need for the program has gone away.

WEALTH REDISTRIBUTION SHOULD BE EXPLICIT, TARGETED, AND COMPETITIVELY NEUTRAL

Politically-mandated wealth redistribution is usually a zero-sum game. Such policies do not create wealth; they simply take it away from some people and give it to others. In many instances, they destroy wealth by re-allocating it in ways that are manifestly inefficient. For that reason, it makes sense to limit the scope of such programs carefully. Subsidies should be narrow and targeted, not broad and all encompassing. The public has a right to know exactly how much money it is paying for the program.

For example, telephone "lifeline" programs, which offer lower-priced telephone access to poor households and require some form of means-testing to qualify, have had a major impact on telephone penetration in low income households. In terms of its effects, its cost, and general considerations of social justice, the Lifeline programs compare very favorably to the pre-AT&T divestiture "universal service" cross-subsidies, which used long-distance revenue to lower the price of local access on a blanket basis. The latter approach to subsidies generated massive distortions in the structure of the industry and huge economic inefficiencies. It was also a hidden subsidy, and it was almost impossible to know who, aside from the telephone companies, was a net beneficiary of it and why.

DO NOT IMPOSE UNIVERSAL SERVICE GOALS ON NEW OR EMERGING MEDIA FORMS

If universal service policy is understood to be a form of wealth distribution, it makes little sense to impose universal service goals on new or emerging media forms. One can equalize access only to well-established goods and services, after a mass market has developed and service levels have been standardized. No matter how egalitarian one's sentiments, there is simply no way around the fact that new technologies must originate somewhere and gradually diffuse to the rest of society.

To insist that every time a new technology appears it must instantly be subject to universal service obligations would impose insurmountable social costs upon governments and private industry. Even worse, it would hinder the process of reducing the cost and redefining the form of a technology in ways designed to penetrate larger markets. (Imagine what would have happened had the government decided to subsidize the distribution of PCs around, say, 1982?)

To return to the Greenstein study of Internet service development, perhaps in a few years it will be possible to determine that the market for Internet access has equilibrated at a point where 5 percent of the most remote rural areas simply are not being served by ISPs. Then, given the importance of Internet access to participation in society and the economy, it may make sense for government to redistribute wealth to subsidize ISP access in those areas but it is also possible that such policies will prove to be unnecessary. Rural ISPs may spread into almost every area of the country or the development of Low Earth

Orbiting Satellite Systems may create competing broadband wireless infrastructures that provide affordable access everywhere. In that case, a universal service policy designed to extend access to rural areas is simply a waste of money or, worse than that, a way to create a class of beneficiaries who will lobby ferociously to maintain the subsidies long after they are needed.

CONCLUSION

The academic and policy literature on universal service in telecommunications has proliferated to such a degree that the topic seems to have lost its moorings. The redistribution of wealth has some manifest positive and negative aspects. It can help to ameliorate some glaring social inequalities and improve the living standards of those on the lower rungs of the social hierarchy. However, if it is taken too far it can destroy individual initiative and freeze economic progress in its tracks. Such subsidies in support of universal service, in and of themselves, are not objectionable, but such wealth redistribution is best confined to a minor role as a supplement to the overall workings of the market economy, and deployed in a carefully targeted manner. Whatever subsidies exist should be visible to those who have to pay for them, and the burden of subsidies should not tilt the competitive playing field in favor of one supplier or class of suppliers over another.

NOTES AND REFERENCES

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4. See Milton Mueller, *Universal Service, Competition, Interconnection, and Monopoly in the Making of the American Telephone System*, (Cambridge, MA: MIT Press, 1997): Chapters 5-7.
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