The New Economy: End of the Welfare State?

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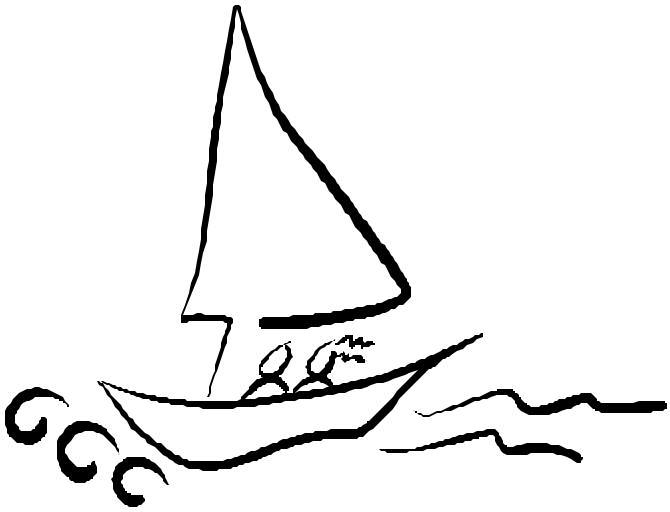

Prepared for the Paderborn Conference, 'Economic Policy in the "New Economy," at the Heinz Nixdorf Museums Forum Paderborn, May 15-16, 2001, organized by the Kiel Institute of World Economics.

Presented at the American Political Society Association annual conference, San Francisco, August 2001.

Abstract:

The New Economy transforms relationships between consumers, business, and government by changing the boundaries of products and marketplaces, by innovating new ways to transact in goods and services, and by enabling whole new activities that depend on the network of information and information technologies that bind the world ever closer together. Together these changes highlight the economics of networks and of information, both of which create tensions between the global commercial reach of firms and customers and the local jurisdiction and authority of law and policymakers.

Just as the New Economy is changing the commercial landscape and relationships, so too is it affecting the 'business' and 'relationships' of governments and policymakers. This essay will trace through the forces of the New Economy on two dimensions--tax systems and the market for personal information. These are two of the most challenging policy arenas and the ones where the archetypal Welfare State is most applicable. That is, in the archetypal Welfare State, high tax revenues fund generous public services and policymakers take a very activist role in governing the lives and environment of their citizens.

For tax systems, I conclude that transaction-based systems will be stressed by the forces of the New Economy and will need to evolve in response to the more complex and global nature of production. But the death of taxes is premature! In the market for personal information, I conclude that there are several possible sources of market imperfection, which allow for welfare-enhancing policymaker intervention to ensure proper functioning of the marketplace. So as to ensure the best outcome, intervention must preserve the private sector's incentive to innovate, even as government has a role as an advocate for voices ignored by the market.

Therefore, the New Economy does not portend the end of the ability of the state to play a significant role in enhancing the well-being of its citizens. But, it does mean that the Welfare State must change the way it operates, the way government sets policies on behalf of its citizens, and the way that citizens respond to the marketplace.

The New Welfare State will be characterized more by incentives and responsibilities. In this Welfare State for a dynamic environment the focus is not enabling transformation to achieve superior productivity and growth, not on riding-out change, moderating outcomes and possibilities. Some might see in these changes the end of the Welfare State as they know it.

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May 7, version 2

The New Economy: End of the Welfare State?[1]

Introduction

The New Economy transforms relationships between consumers, business, and government by changing the boundaries of products and marketplaces, by innovating new ways to transact in goods and services, and by enabling whole new activities that depend on the network of information and information technologies that bind the world ever closer together. Together these changes highlight the economics of networks and of information, both of which create tensions between the global commercial reach of firms and customers and the local jurisdiction and authority of law and policymakers.

Policymakers view this dynamism with differing degrees of urgency and dismay. Urgency, because of the potential for large productivity gains that will support higher economic welfare. Dismay, because the transformative forces that generate the New Economy gains may, at the same time, undermine their ability to do the job of government or indeed do the job of the Welfare State.

Just as the New Economy is changing the commercial landscape and relationships, so too is it affecting the 'business' and 'relationships' of governments and policymakers. What is the 'business' government? We can think of the 'back-office' activities of government as procurement, and raising and redistributing taxes. The 'front-office' activities of government are providing public services. The New Economy portends significant changes in the business of government, just as it is transforming the activities of commercial firms.

What about 'relationships' between government, its citizens, and its firms? Government sometimes is the advocate for people whose voices may be ignored by firms (as in minority interests). Sometimes government is the advocate for society's future (as in pollution legislation). Government can put in place regulations to improve the functioning of markets when imperfections arise (as in financial supervision or competition policy). The New Economy will significantly affect these relationships as well, and the forces of the New Economy bring new challenges and dimensions into these relationships.

[1] Prepared for the Paderborn Conference, 'Economic Policy in the "New Economy," at the Heinz Nixdorf Museums Forum Paderborn, May 15-16, 2001, organized by the Kiel Institute of World Economics. Also presented at the American Political Society Association annual conference, San Francisco, August 2001.

This essay will trace through the forces of the New Economy on two dimensions--tax systems and the market for personal information. These are two of the most challenging policy arenas and the ones where the archetypal Welfare State is most applicable. That is, in the archetypal Welfare State and with the consent of the governed, high tax revenues fund generous public services and policymakers take a very activist role in governing the lives and environment of their citizens.

For tax systems, I conclude that transaction-based systems will be stressed by the forces of the New Economy and will need to evolve in response to the more complex and global nature of production. But the death of taxes is premature! Governments will continue to be able to raise revenues to finance public expenditures, and will continue to be able to differentiate themselves by level of taxation and extent of expenditure: harmonization of tax rates and public services is not inevitable.

In the market for personal information, I conclude that there are several possible sources of market imperfection, which allow for welfare-enhancing policymaker intervention to ensure proper functioning of the marketplace. However, the type of intervention is extremely important. So as to ensure the best outcome, intervention must preserve the private sector's incentive to innovate. Thus, whereas government must be an advocate for voices ignored by the market, enforcing where necessary, it must not impose specific strategies, nor demand a homogeneous outcome.

Therefore, the New Economy does not portend the end of the ability of the state to play a significant role in enhancing the well-being of its citizens. But, it does mean that the welfare state must change the way it operates, the way government sets policies on behalf of its citizens, and the way that citizens respond to the marketplace. Some might see in these changes the end of the welfare state as they know it.

The New Economy, Economic Transformation, and Policy Challenges

Information and networking technologies, and increasingly the information itself, are key drivers of the New Economy. But, it is the response of the market participants to transform their activities that generates the gains, not the technologies alone. That is, information technologies (computers, hardware, and software) have been used to process numbers, create databases, and enhance corporate operations for quite some time (at least in the United States). And, firms have collected and processed information about prices, preferences, inventories, and inputs to improve internal operations and sales. But most of these technologies and information have been kept internal to a firm. The revolution of the New Economy builds on and extends information technologies to give global reach, interoperability, and accessibility to these technologies and to the underlying information, to the firms, consumers, and government.[2]

New Economy means new markets in geography, time, and information

[2] See Carl Shapiro and Hal R. Varian, Information Rules: A Strategic Guide to the Network Economy, Boston: Harvard Business School Press, 1999.

The structure and capabilities of the Internet and information and communications technologies reduce frictions in the marketplace in the three dimensions of time, geography, and information. The New Economy fosters global production of products and services, which, thanks to more information, are tailored exactly to what the buyer needs and are available exactly when the buyer wants it. For example, tenders put up on the Internet by large firms in the United States, such as General Electric, receive responses from small firms in Africa; before these firms would have had no chance to compete. Global customer service in the native language of the caller and responding to specific questions associated with their particular order can be available 24 hours a day and seven days a week. Internet access means that artisans in remote villages in Vietnam can sell into the global market. The Financial Times packages its materials in several different ways, updates it continuously for different time zones, links to stories in other sources, and transmits through several distribution channels to satisfy the information needs of specific recipients. Business-to-business exchanges and auctions widen the range of participants, improve price revelation, and allow more timely purchase and delivery of parts and services.

New Economy production 'bundles' goods, services, information, and time

The global New Economy marketplace increasingly will offer product "bundles," priced uniquely by time, location, and what used to be termed the "final" good or service. Airlines have used this strategy for pricing seats for some time, as have package delivery services, such as FedEx. The Internet and ICTs allow such bundling to become much more prevalent, which at the same time creates more market niches for firms to occupy. For example, some Bloomberg clients pay for real-time stock prices; others get that information for free 20 minutes delayed, but pay for a time series of the historical data. The customer needs are different, so Bloomberg bundles its information in different ways, creating more value to both the firm and the customer. Or, some people buy computers from Dell.com and some from Gateway Country Stores, not because the computers are different, but because preferences for shopping, touching, leasing, customer assistance and other factors, such as shopping-as-entertainment, matter. The computer is just one part of the product bundle that is being purchased. Even for intermediate good producers, such as industrial supplies, the Internet and ICTs enhances this ability to bundle and use time, geography, and information more effectively. Consider the range of commodities (including broadband capacity) traded by ENRON. Without the capacity of the Internet to create markets in time, geography and information and to bundle these three attributes, their business would not exist.

Economic gains come from transforming activities, not just ICTs

The lower frictions to using time and geography combine with the information and network characteristics of the Internet marketplace to allow more ways for business to create value. Firms can focus on which part of the value-added chain that they do best and outsource other parts to subsidiaries or strategic allies anywhere on the globe. Moreover, more stages of production can be digitized (blueprints and software production, for example) where "assembly" and the delivery of value is via the network

itself. From aircraft to architectural designs, more production is being done on the Internet by international teams. Without these transformations of the scope, pace, and location of economic activity, little benefit will be derived from the Internet.

Indeed, it is clear that the New Economy involves, but is a broader concept than, information and communications technology (ICTs), the Internet economy, or e-commerce. These are globally available and evolving tools, methods, and structures, whose incubation and diffusion in any domestic economy determines the extent of the economic gains. For example, in the 2001 Economic Report of the President, the US Council of Economic Advisors (CEA) noted that between 1995 and 1999 fully one-third of American output growth came from increased spending on information technology. That impressive figure is often what other policymakers want to emulate, but it represents only a small part and only the beginning of the story.

The more important driver of the gains to be expected in the New Economy is not IT sales, but the behavior of individuals, firms, markets and governments using that technology in a networked environment. The CEA report measured the evidence of this broader benefit of the New Economy to contribute yet another one-third of US output growth in the last half decade. Going forward, it is the step-up in multi-factor or total-factor productivity (MFP or TFP) that will most enrich our economy, far more than the capital deepening represented by IT investment in hardware and software. A simple way to understand MFP/TFP is that it reflects doing things differently in a business, in order to get more output out of the same or fewer inputs (capital, equipment, labor) – in other words, TFP/MFP is a proxy for restructuring.

The New Economy presents new policy challenges and exacerbates old ones

The transformations that are integral to the economic gains of the New Economy generate policy challenges. What with bundling of tangibles and intangibles and strategic alliances around the globe, it is increasingly difficult to determine exactly where (in a geographical sense) or when (in terms of the stage of production and bundling) value is created. Product bundles can be offered through firms that can locate anywhere, whose locations can change quickly, and whose ultimate residence may be hard to track down. Even tangible merchandise, purchased at a point in time and at a particular location may only be identified by the delivery destination of record, not the ultimate user. With a bundle characterized by a digitized and downloaded transaction, neither the origin point nor the ultimate user may be determinable (e.g. Napster music). And, some transactions will take place intermittently, through an intermediary, and involve the 'rental' of intellectual property (e.g. use of software via application service providers). These issues have important implications for tax systems where jurisdictions often are bounded by political or geographic borders, rather than by commercial or economic alliances.

Information itself creates new policy challenges. With the Internet, information increasingly resides between the creator and the user and is used interactively (consider the examples of "cookies" or of application service providers). Access by both user and producer is key to the transformations that generate economic value. Moreover, unique information is increasingly being combined with other information over networks. This

collection of information has the economic characteristic of a "public good" or "spillover." That is, the value of the collected information to a firm is different from the sum of the values of the individual elements to the set of individuals (much as the individual driver on the road does not consider the congestion that results). A related consequence of the information network is that individuals may have little economic voice or economic power relative to the aggregator of the information (much as individual workers have little negotiating power vis-à-vis a firm in the absence of a union). As is well known from economic theory, spillovers and relative economic power may open the door for explicit public policy intervention so as to properly price or internalize the difference between the social and the private value of the activity.

Evolution of Tax Systems in the New Economy[3]

Transforming activities in the New Economy have several important attributes that matter for tax systems: Global reach, value creation through information, product 'bundling' and production alliances. These factors will put pressure on existing tax systems. Policymakers can ignore or try to offset these pressures. But, a more proactive approach, which is the one being taken by the private sector in its activities, is to consider how fiscal systems might need to evolve. A final factor of importance, particularly for taxes, is that there is greater mobility and potentially greater economic anonymity for participants in this marketplace.

Global reach implies a great overlap of national jurisdictions. International coordination of tax policies, though not necessarily harmonization of tax rates, will likely be necessary in the future. Policymakers need to consider carefully how best to target the tax (and other parts of the fiscal) system to meet citizen's needs and social objectives of redistribution of income. This may imply a fiscal system more focused on the income and the individual and on transactions and the corporation.

Value creation is increasingly complex. Are the product 'bundles' goods or services, both or neither? Do sales generate business income or do leases generate royalties? Both indirect and direct tax systems that depend on knowing and distinguishing the "what, who, where, and how" of transactions will fit poorly within the emerging reality of economic activity.

Greater mobility of firms and activities may make transactions more difficult to trace (or make the cost of doing so unrealistic or make the erosion of privacy unacceptable). This puts a greater premium on increasing the incentives for voluntary compliance and reducing the incentives for forum-shopping both within and across jurisdictions.

[3] This section draws on Chapter 6 of Global Electronic Commerce: A Policy Primer and on "Transatlantic Issues in Electronic Commerce," translated into Italian in Beyond Seattle: A New Strategic Approach in the WTO 2000, edited by Isabella Falautano and Paolo Guerrieri "IAI Quaderni" no.11, Rome, October 2000. The English version is working paper …. Available at www.IIE.com.

On the plus side, the innovations of the Internet have great potential for reducing the cost of tax administration and for increasing the ability of the government to serve its constituents. Moreover, the transformations of the New Economy raise the potential growth of the economy and tax revenues. For both reasons, tax burdens could be lowered on account of the greater efficiency of fiscal administration and higher potential growth.

The current response is…hold on to the status quo

There are immediate issues. Many tax systems depend on indirect taxes, such as sales taxes, value-added taxes (VAT) or goods and services taxes (GST) to raise a substantial share of government revenues.[4] Policymakers are concerned about the potential erosion of their tax revenue right now.[5] On the other side, firms and individuals want to know how much they need to pay and to whom. So, most analyses of New Economy and tax tend to focus on the specifics of how to implement existing tax systems in a changing environment.

Various domestic and international groups have been discussing how to apply tax law to Internet and e-commerce transactions.[6] The most challenging areas are sales and value-added taxes, particularly when tax treatment of goods and services differs, when digitized transactions and activities cloud the determination of permanent establishment, and when the "character" of income earned (e.g. business profits vs. royalty income) is unclear.[7] Yet the challenge is not only the treatment of domestic transactions. What happens when transactions cross international borders and the tax treatment is different?

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[4] In the OECD, all the countries except the United States have or will soon have a VAT/GST system. In the countries of the European Union (EU), VAT revenues account for about 30 percent of total tax revenues. In the US states, sales and goods taxes account for about 12 percent of total revenues, but range to much higher percentages in some states.

[5] Efforts to measure the potential loss of tax revenue are difficult because of dynamic response. For the US, Austan Goolsbee and John Zittrain, "Evaluating the Costs and Benefits of Taxing Internet Commerce," *National Tax Journal*, vol 52 no. 3, September 1999, pp 413-428 calculate a loss over the next few years of less than 2 percent of sales tax revenues. For the full range of countries around the world, Susan Teltscher, "Revenue Implications of Electronic Commerce: Issues of Interest to Developing Countries," mimeo, UNCTAD, April 2000, also finds loss of tax revenues of less than 1 percent overall, although the figure is higher for some countries.

[6] Among international organizations, the OECD membership, in conjunction with non-member governments and private sector groups representing business and tax accountants, has been analyzing since 1997 how electronic commerce might impact international and domestic taxes. The outcome of that effort was the "Tax Framework Conditions" which reaffirms five key principles that guide governments generally in the application of taxes within the overall regime: neutrality, efficiency, certainty and simplicity, effectiveness and fairness, and flexibility. See http://www.oecd.org//daf/fa/e_com/e_com.htm#top_e_commerce.

[7] See The OECD Model Tax Convention, which is a blueprint that many countries have used as a framework for bilateral tax treaties. It apportions tax responsibility and revenue so as to avoid double taxation of income earned through foreign investment. An overview is available at <http://www.oecd.org//daf/fa/treaties/treaty.htm>. See also: <http://www.oecd.org//daf/fa/material/mat_07.htm#material_Model> for the most recent information on the articles of the model convention.

Both the US and the EU have been struggling with how to apply sales and value-added taxes to e-commerce transactions, both within and across borders. [8] Neither body fully recognizes that decisions taken in the domestic arena have implications for cross-border application of these types of taxes. Inconsistent tax treatment of transactions between the US and the EU, and within each country as well, already has surfaced.

In the US, when the Congress passed the Internet Tax Freedom Act in 1998 (which kept domestic Internet transactions free from any "new" taxes for three years but did not revoke existing sales or use taxes), it mandated review of the implications of electronic commerce for domestic sales taxes. A majority of members of the Gilmore commission proposed (they could not formally recommend to Congress, because no super-majority view was reached) that digital products downloaded over the Internet (including software, books, or music) should not be taxed. In the interests of tax neutrality, their tangible equivalents also would be tax exempt. This represented a "harmonizing down" approach, which could generate pressures for lower sales tax rates overall in order to make more consistent the treatment of purchases over the Internet and through other means for products not explicitly exempted.

The Commission opinion has implications for taxing authority and tax jurisdiction. Indeed, one objective of the Commission's proposal was to encourage states and localities to simplify their own structures and reduce the myriad state and local taxes (some 30,000) which are both administratively cumbersome and encourage tax-strategizing behavior.[9] Implications at the international level were not addressed, since the Commission did not have the mandate to address cross-border issues.

In contrast to the US, the EU tax authorities are drawing a bright line between goods and services purchased over the Internet, and to a greater extent than the US already have captured these transactions in their tax orbit. All electronic transmissions (those under the general term "soft goods", such as software, books, or architectural drawings) have been classified as services which, therefore, should be taxed at the appropriate VAT rate.[10] Whereas the EU ruling would seem to simplify and increase certainty in the tax environments, there are many different rules governing applicable location and rates for taxing services so the simplicity is an illusion. Moreover as the

[8] The VAT is a tax on supplies of goods and services applied at all stages of the production process. It is charged by the supplier and then credited by the users of the inputs in the course of doing business. Each transaction leaves an invoice path, so the VAT system essentially relies on "double-entry" book-keeping by VAT-registered businesses on both sides of a transaction. The final consumer is not a VAT-registered entity, so ultimately pays the tax. The US sales tax system is different in that final users (usually retail) pay the taxes, principally only on tangible property (with exceptions) and usually not on services. Business inputs generally are exempt from the tax.

[9] The National Governors Association is examining how to simply their sales and use taxes so as to apply computer technologies to tax administration. See Streamlined Sales Tax project http://www.nga.org/nga/newsRoom/1,1169,C_PRESS_RELEASE^D_1067,00.html December 22, 2000.

[10] For an overview of the treatment of e-commerce transactions see <http://europa.eu.int/scadplus/leg/en/lvb/l31041.htm>

creation of product bundles becomes more complex, the brightness of the delineation dims. [11]

Unlike the US, which has not addressed the cross-border issue, the EU has proposed that businesses both within and outside the EU apply, collect, and remit VAT taxes on products (including software, books, and music) purchased or downloaded from the Internet by non VAT-registered entities.[12] The EU has suggested that non-EU firms should establish their tax identity within an EU locality in order to determine which rate of tax to charge when selling such products business-to-business.[13] In essence, using the argument of tax neutrality, the EU is "harmonizing up" by applying service-VAT rates to sales of all digital products and is proposing that non-EU firms become EU firms to establish a tax presence even if they do not need to establish such a presence for any other economic reason. This extra-territorial application of tax authority is a key jurisdictional challenge posed by digital transactions in the New Economy.[14]

All told, the higher information content of bundles created in the global Internet marketplace will highlight disparities in tax systems and jurisdiction. The rates to apply to transactions, the responsible jurisdiction for the rate, and the allocation of income to different governments will be increasingly difficult. The systems are static, founded on rules formed incrementally by case law or infrequent multilateral negotiations. The current approach will yield an increasingly rules-driven and fragmented system that invites evasion and forum-shopping, is costly to administer and distortionary, and does not support the maximum benefits that can be achieved with the New Economy. Policymakers should look to the future not hang on to the tax regimes of the past. What kinds of domestic tax systems and international tax agreements would raise revenues in an efficient, effective, and equitable manner?

Towards a new tax system focused on personal income

The New Economy is network-driven, time-fragmented, and information-intensive. Value is created around the globe in complex, real-time interactions. These observations lead us to examine a significant source of income for raising tax revenues: labor compensation. How does the global network impact its taxation?

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[11] For a different view, see "Taxation of E-Commerce: Persistent Problems and Recent Development," Stefan Bach, Markus Hubbert, and Walter Muller, in Vierteljahrshetze zur Wirtschaftsforszurg, 4/2000, pp 657-678.

[12] See "Europe Plans to Collect Tax on Some Internet Transactions" by Edmund L. Andrews, New York Times, March, 2, 2000; http://www.nyt.com/library/tech/00/03/biztech/articles/02tax.html. The amount to date of "lost" tax revenue from such cross-border sales appears by all accounts to be miniscule. Of greater import, it appears, is the argued disadvantage of bricks-and-mortar stores vis-à-vis on-line merchants who have not had to collect VAT.

[13] Document of the EU commission regarding electronic commerce and indirect taxation: http://www.europa.eu.int/scadplus/leg/en/lvb/l31041.htm;

[14] If the issues for indirect taxation were not difficult enough, there are challenges to direct taxation as well. For a further discussion of these issues, which only supports further the main points of the text, please see …….

Among the ways to raise tax revenues, taxing labors' wages has probably been the least affected by the transformation of products, production process, or marketplaces of the New Economy. Labor, by and large, remains within the same political jurisdiction as the tax authority, which is relevant to the extent that government services which are paid for through tax revenues generally are targeted toward people within the jurisdiction and who vote.[15] In the knowledge-intensive New Economy, the source of value-added increasingly is labor-based, rather than based on commodity resources or manufacturing processes. Taxing labor's wages avoids the issue of how to classify the outcome of what or when they do it (good, service, intermittent use of IP), so it side-steps the problems of the complexity of the product 'bundle'.

There also are potential savings in tax administration. First, there are fewer workers in the world than transactions, particularly when the current method of taxation is VAT. Even New Economy firms pay close attention to how much they pay their workers. Taxing wages does not solve all problems, since increasingly remuneration is composed of stock options and other benefits. Yet tax authorities can work with firms to ensure that income and other sources of labor remuneration can be taxed using methods that including reporting, audit, or declaration. Moreover, tax authorities can work with firms that engage in cross-border transactions and production alliances firms to ensure the proper accounting for incomes earned, although a firm must be willing to comply with an extra-territorial request for information about its workers' compensation. But, this is less onerous than actually collecting and remitting tax revenues. In another vein, cross-border (or even within-border) flows of information about wages and compensation raises privacy concerns. All told, this new approach enhances the partnership between firm and tax authority to yield benefits for the public. Private firms should not be the taxing authority, but they should cooperate with it.

The questions of fairness and compliance inevitably arise when labor income is taxed relatively more than consumption or capital income. Tax evasion is why many countries chose the VAT, GST, or tariff systems to begin with. These are not new issues, but the reduced ability to tax value-added, transactions, or corporations raises the stakes for finding appropriate answers and charting a course toward changing tax regimes to reflect the new realities.

Looking forward, the new tax regime should have a downward bias for tax rates on transactions and broad-based taxation of personal income. Since the jurisdiction of public services matches the jurisdiction of tax raising, a country's tax regime can be differentiated by the preferences of its constituents for progressivity, as well as for level of tax rates and scope of social services.

Imperfections in the Market for Information

[15] This is not to say that labor cannot move. But, it is relatively less mobile than firms, particularly at the margin. And, many highly skilled migrants will work for firms that are contained in the tax orbit of some jurisdiction.

Networked information technologies and increasingly the information itself are driving the benefits of the Internet marketplace. For example, when all members of a global supply chain can follow the whole process, operating efficiency increases, through-put quickens, and all members of the supply chain benefit. Or, a person using the Internet can tailor the information that appears in her newspaper and firms can meet detailed product preferences, thus saving time and targeting specific demands more effectively. Or, when information from both buyers and sellers appears on a business-to-business auction site or exchange, better pricing of products (for example, office supplies), superior usage of equipment (for example in trucking), and quicker elimination of excess (say of past-season fashion clothing) all are now possible. The opportunities of global electronic commerce created by information technologies increase the value of information and the ease of obtaining valuable content. But, with this much information, the potential for misuse also arises. [16]

Comparing the 'market' vs. the 'mandate' approach to resolving the imperfection

There is a tension between collectors of information (the relatively few firms that aggregate information) and providers of information (the very many individual business or consumer users). Aggregators (for example, DoubleClick) highly value the collection of information because they can dissect, combine, and either use or sell the information to produce better-tailored products and more efficient processes. So, these firms will want to collect information from everyone and will tend to ignore individual users who want fewer personal or unique business data collected. Under these circumstances, concerned individuals face an undesirable choice: Use the Internet, but be fearful that the information collected may be used inappropriately; or don't use the Internet, and lose the benefits of this new medium for information and business activity.

What is the role for policy intervention to balance these sides—the demands by individuals to control and protect their personal information against the desires of those who want it to create new products and services? Broadly, there are two strategies. Policymakers can *mandate* a specific standard that all firms must follow for how data are collected and used. For example, and characterizing in general terms, the EU Privacy Directive mandates a specific standard for the treatment of most personal data of EU residents. Or, policymakers can promote incentives so that the *market* innovates and improves the range of choices on whether and how data are collected, compiled, and cross-referenced. The US approach, characterized broadly, which minimal legislation that addresses only financial, medical, and children's information, and where private entities determine and adhere to self-regulatory guidelines, is an example of a more market-oriented strategy.

Is there a winner (in an economic sense) between the mandate and the market approach to balancing the benefits of versus the concerns over the use of data? The

[16] For more discussion of the nature of "public goods" in the Internet marketplace, see pp. 37-41 "Government Guidance and the Economics of Imperfect Markets for Information," in Global Electronic Commerce: A Policy Primer by Catherine L. Mann, Sue E. Eckert, and Sarah Cleeland Knight, Institute for International Economics: Washington, July 2000.

economic theory of the second best suggests that the market solution and the mandate solution cannot be ranked. In neither case will the needs of all individuals be met, nor can we be sure that society's well-being is maximized.

On the one hand, because there are many users and few aggregators, the market approach is likely to yield an incomplete set of "information-use" policies. So, the privacy preferences of each unique user may not be met. What are the consequences? Consider a business example. Suppose a firm worries so much about revealing strategic business information by participating in a B2B marketplace that it refuses to participate; the benefits from having such an exchange would be reduced by having fewer players. More generally, the value of the Internet derives from its participants, and increases exponentially with the number of users. So the fear of participating that prevents its use exponentially reduces the benefits of the Internet to both individuals and to society.

On the other hand, the mandate solution is a sort of "one-size-fits-all" policy that assumes that each person or business has the same preference over revealing information as is spelled-out in the mandate. Because people and businesses are not all alike in their attitudes toward privacy, some specific preferences will not be met. In this case, those left out probably would be willing to disclose more information to get more tailored products and services. So, with a mandate policy some buyers and sellers won't bother to log-on. As in the case above, the value of the Internet is reduced exponentially by the lower level of participation.

We can't really tell which policy approach will result in the greater number of unhappy users and this is why we can't rank the alternative policies in terms of their impact on efficiency or society's well-being. So, what is the difference between the two approaches?

Under the market approach, firms continue to face incentives to try to satisfy specific and heterogeneous privacy demands, particularly if those demands are effectively communicated to the information aggregators and are backed by enforcement. The incentives come from the very network benefits (translated into potential profits) that are being lost if the privacy options are insufficient and users defect. By contrast under the mandate approach, the private sector has fewer incentives to innovate to resolve market imperfections since there are common rules for all to follow, and the enforcement issue remains.

What about the Safe Harbor model?

Beyond the theory of these alternatives and how they might work within the domestic marketplace, is the important issue of the overlap of government jurisdictions. One example of an interoperable approach to two different approaches to privacy protection is the March 14, 2000 "safe-harbor" agreement between the United States and European Union. Under the agreement, American firms receiving personal data from the EU can subscribe to self-regulatory organizations such as the Better Business Bureau's

BBB*Online* thereby making a commitment to follow the EU rules for data on EU individuals. The firms could be subject to legal action by the US Federal Trade Commission if they do not abide by their commitment.

Does "safe harbor" represent an interoperable approach?[17] It would appear to ensure continuity of US-EU cross-border data flows, but this is only part of the problem. Countries not party to the safe-harbor agreement wonder what will happen to their firms. Must they follow the EU Privacy Directive? Can they enter the US safe harbor? Do they need to carve out their own agreement—if so with whom? The possibility is that cross-border data flows could be fragmented, routed around some countries and through other countries, with the potential for great loss to efficiency and global network benefits. But, more important, the safe-harbor arrangement between the US and the EU does not yield new privacy options for users, which is the true crux of the matter.

In such a technologically dynamic environment, retaining the incentive for private sector innovation is crucial. The market-oriented approach and cutting-edge technology offer the greatest potential to come up with innovative solutions to meet the greatest variety of demands. Innovations such as Anonymizer and Pretty Good Privacy (PGP) come from individual firms. The Platform for Privacy Preferences (P3P) is the outcome of an industry-group discussion and could become a standard feature on Internet browsers.

But, the combination of market incentives and technological prowess may not be enough. Policymakers in the US (where the market-oriented policy approach is strongest) must push harder to get firms to respond to incentives, including that the privacy product are easy to use. One way is to threaten what might happen if privacy demands are ignored and opportunities to improve information-use policies squandered. For example, the plethora of privacy legislation put forward before Congress in 2001 threatens the market-oriented approach and could yield mandated standards. A more active statement by US policymakers is needed and clearer threats outlined if the private sector is to respond appropriately.

Final Observations: Evolving Concept of What Is the Welfare State

The benefits from the new economy can only be gained through transforming the activities of individuals, business, and governments. A key component of those gains comes from more closely aligning the interests of the consumer and the producer, which implies information-intensity and greater heterogeneity in product 'bundles'. Policymakers need to allow for these transformations, for the intensive use of information, and for the heterogeneity in output.

[17]For additional discussion of Safe Harbor, see "The Governance of Privacy in the Age of the Internet: The EU-US "Safe Harbor" Accord and Its Consequences," draft paper by Henry Farrell.

However, these aspects of the new economy can cause problems in the archetypal Welfare State. First, transformation in activities means, at least for some time, volatility in employment and differential returns to skills, among other things. To the extent that the archetypal Welfare State smoothes-out these changes, either the transformations may not occur or the cost of smoothing them out could be high. Second, information is a key ingredient to the transformations and the creation of heterogeneous product bundles. To the extent that the archetypal Welfare State mandates a uniform approach to the use of information (taking the view that it knows best what its constituents want), the heterogeneity in interests will not emerge to inform the marketplace.

How might the old Welfare State evolve into the New Welfare State for the New Economy? To reduce the costs of transformation, the key is education, training, and information. The New Welfare State for the New Economy will focus even more on creating opportunities and the ability of people and firms to take advantage of them, rather than focusing on moderating outcomes. The evolution of the tax system toward income-based methods will generate the revenues to fulfill this objective.

To reduce the potential for misuse of information while also allowing the value of heterogeneity to emerge, the New Welfare State should focus on preserving the private sector's incentives to innovate, while at the same time informing citizens about their choices, and enforcement where necessary. Individuals need to know more about what is the value of their information and how it can be used. Firms need to be held responsible for information use, and enforcement of mis-action swift. Because only the private sector can evolve new strategies for both using and protecting information, preserving the incentives to innovate is paramount.

The New Welfare State will be characterized more by incentives and responsibilities. The public sector needs to promote incentives so that the private sector—defined either as an individual or as a business—works to transform the economy, to close the market imperfections in information, and to manage the problems of cross-border jurisdictional overlap in tax regimes. The private sector—as individuals and firms—needs to be willing to take advantage of training and education so that it can adjust, must be willing to work with the public sector to pay for such activities, and must come-up with strategies that meet the demands for a fuller-range of information-use options. This is not the end of the Welfare State, it is a Welfare State for a dynamic environment that focuses on enabling transition to achieve superior productivity and growth, not one that focuses on moderating outcomes and possibilities. Like the picture on the front page, both corks and yachts can weather stormy seas, but yachts will make forward progress to land, whereas corks will just bob up and down.

The New Economy: End of the Welfare State?

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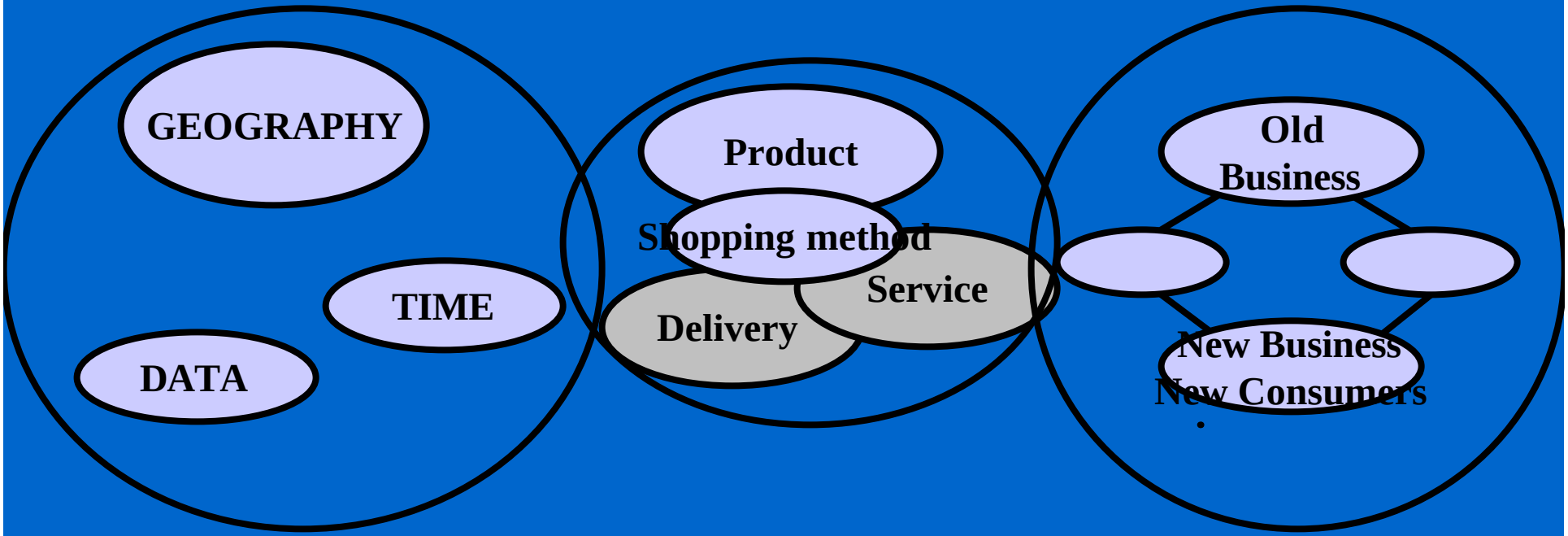
May 2001

What's New About Internet Markets?

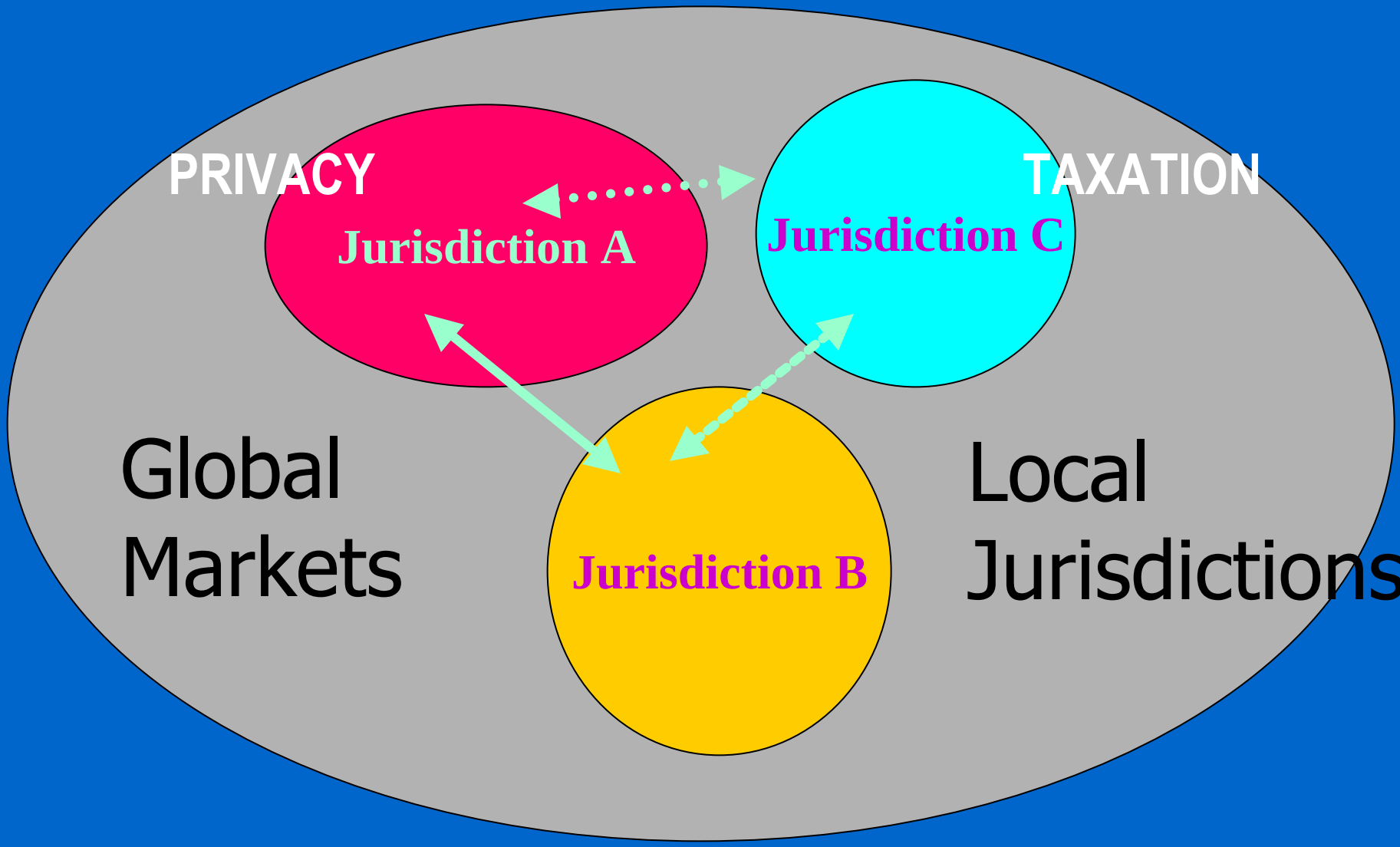


- **New Markets**: Global, information rich, network benefits
- **Bundled Products**: New products , changed boundaries
- **Transformation:** Better old transactions, new relationships

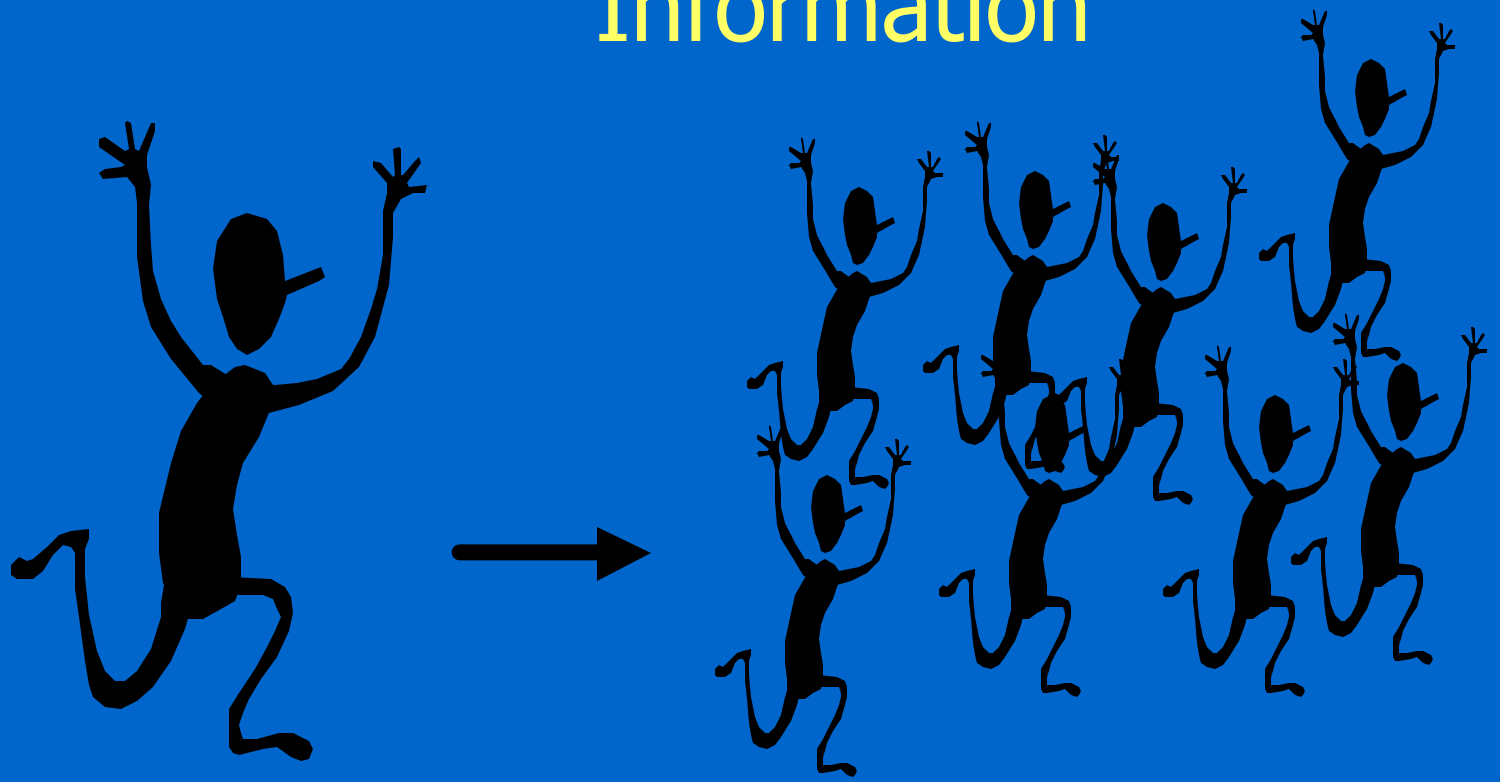
New Economy Implications?

- Business: Transformation of activities & relationships (TFP) = 1/3 of productivity gain;
  - 10-30% gains in the ‘back-office’
  - 60 % say is to increase ‘front office’ sales
- Government : Transformations
  - Back-office: Procurement, raising and redistributing taxes
  - Front-office: Government role in constituent life

Policy Challenges in the New Economy:



Privacy: Imperfections in the Market for Information

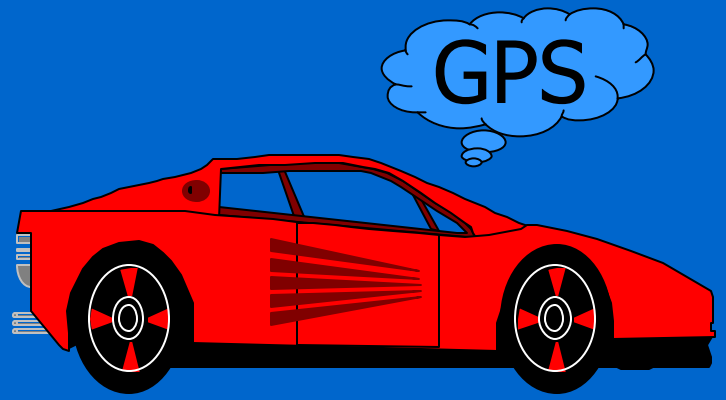


- Incomplete markets: Arrow-Debreu model
- Relative market power: "union-bargaining model"
- Externalities: Social vs. private value model

Privacy: Policy Approaches

- Government “knows best” vs. as “advocate”
- Mandate (EU) vs. market (US) approach
  - Mandate/“Knows Best”: Homogenizes options
  - Market /“Advocate”: Incentives for more options
- Ranking?
  - Both create “unhappy” users; both are “second best”; both require enforcement
- Safe Harbor?
  - Rocky, bilateral, does not add privacy options

Pressures on Tax Regimes & Classification:



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- VAT/GST/sales
- Business income

- Goods
- Services

- Value-creation: who, what, when, how much
- Character of income: sale, lease?
- Mobility of factors and transactions

Tax Systems: Policy Approaches

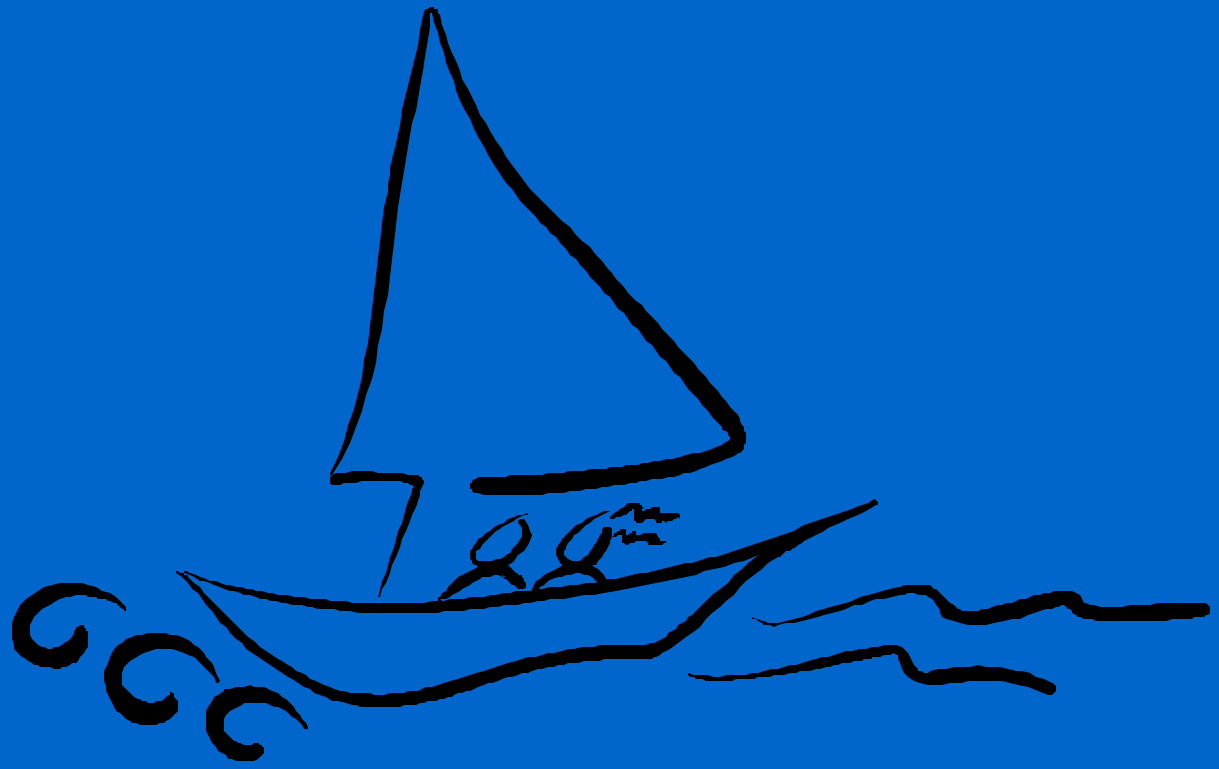
- Status quo or simplify?
  - Simplify down (Gilmore Commission) or harmonize up (EU approach)?
- "Name and shame" or OK competition?
- Technological Solutions?
  - Efficient use of resources;efficient outcome?
  - Privacy implications?
- Regimes should be endogenous
  - Focus on fewer transactions; ultimate source of value added => Labor income

New Economy …
And the Old Welfare State

- New Economy gains
  - Transformations increase volatility
  - Intensive use of information requires choice
  - Heterogeneity implies differential returns
- Old Welfare State
  - Smoothes volatility; parental supervision; equalizes returns
  - Moderates outcomes--is this still desirable?

Policy and the New Welfare State:

- Intervention must preserve private sector incentives
  - to innovate; to demand choice; for life-long learning;
- New Welfare State
  - Prepare constituents for outcomes, not moderate them: Education, R&D
  - New social contract--high taxes and high services through consent of the governed. Some will leave; let them.



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