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WEEKLY ECONOMIC BRIEFING OF THE PRESIDENT OF THE UNITED STATES

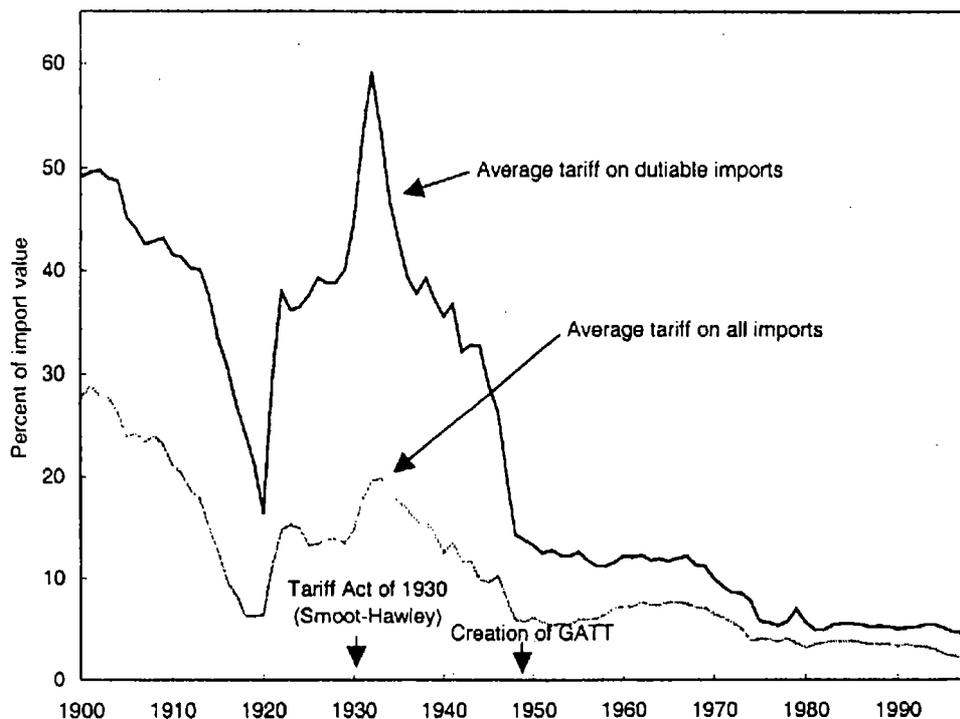
Prepared by the Council of Economic Advisers
with the assistance of the Office of the Vice President

November 19, 1999

*Copied
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(entire report)*

CHART OF THE WEEK

U.S. Tariff Rates, 1900-1998



Until the rounds of multilateral trade negotiations after World War II, U.S. tariff rates were quite high. Tariffs on dutiable imports reached almost 60 percent under the Smoot-Hawley tariff act. By 1998, however, the average tariff rate was 4.7 percent on dutiable imports and 2.0 percent on all imports.

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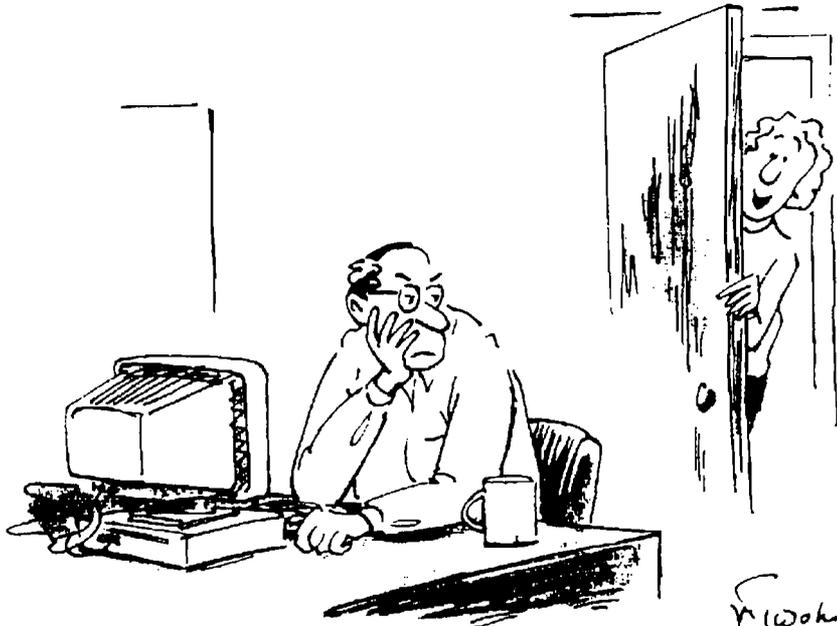
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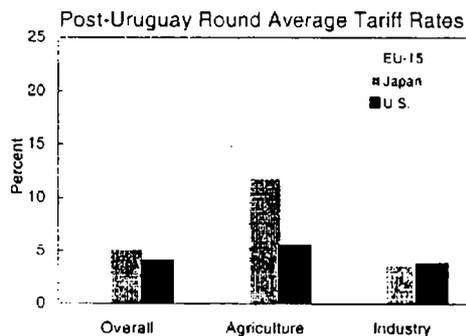
"Any intellectual property yet, honey?"

SPECIAL ANALYSIS

Who Is the Most Open of Them All?

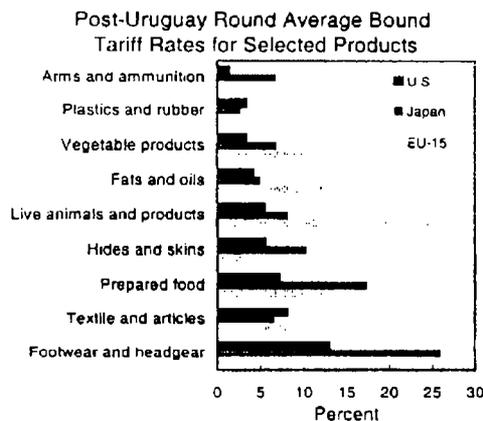
Through successive GATT/WTO rounds, world tariffs have been reduced from an average of 40 percent in 1947 to roughly 4 percent today. However, tariffs still exhibit wide variation, both across countries and across sectors within a country. One motivation for U.S. participation in negotiating lower tariffs at the WTO is that, on average, our rates are lower than those of our major trading partners. It also turns out that although we have a few products with very high tariff rates, we have fewer high tariffs than Japan or the European Union.

Uruguay Round commitments. At the WTO, the United States has committed to "binding" its overall MFN tariff rates to an average of 4.1 percent. This



compares with 5.1 percent for Japan and 7.4 percent for the EU (see upper chart). These differences are due mainly to the higher protection accorded to agricultural products elsewhere: 19.5 percent in the EU and 11.7 percent in Japan, compared with the much lower 5.5 percent in the United States. Rates for industry (manufacturing products) are much more uniform.

Highly protected sectors. The lower chart compares the average tariff rates for several product groups, ranked by the degree of protection received in the United States.



The footwear industry is the most protected U.S. sector, with an average rate of 13 percent for the combined footwear, and headgear product group. While this exceeds the EU rate of 8 percent, it is much lower than the Japanese average of 26 percent. The textile and apparel industry, another highly protected sector in the United States, has an average tariff of 8.0 percent, similar to the average for the EU (7.9 percent) and above that for Japan (6.6 percent).

Distribution of tariff rates. As averages may conceal as well as reveal, it is also useful to examine the dispersion of tariff rates. Out of roughly 10,000 tariff rates recorded for each group of countries, 66 percent of the U.S. tariffs are 5 percent or lower. By contrast, 54 percent of EU tariffs and 59 percent of Japanese tariffs are 5 percent or under. While both the EU and the United States have 98 percent of

their rates at or below 20 percent, only 94 percent of Japanese rates lie in this range.

Who has the highest of them all? The United States actually has a few products whose tariff rates exceed any in Japan or the EU. Seven tobacco products have rates above 300 percent, and five peanut products have rates over 100 percent. The highest EU rate is 89 percent (also for a tobacco product) while the highest Japanese rate is 60 percent. However, the United States has fewer of these high-rate categories than either the EU or Japan. While the United States has only 170 categories with rates between 20 and 60 percent, the Europeans have 242 such categories and the Japanese 514.

Tariff peaks are costly. From a purely economic perspective, tariff-induced economic costs rise with the square of the tariff rates, as a rough rule of thumb. Thus a 2 percent tariff is four times as inefficient, and a 3 percent tariff is nine times as inefficient as a 1 percent tariff. Because businesses and firms make production decisions based on price signals, distorting prices by putting 10 percent tariffs on some, but not all, products is probably more inefficient than applying an across-the-board 5 percent rate.

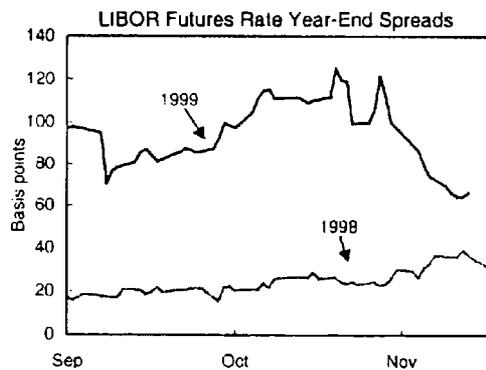
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SPECIAL ANALYSIS

Y2K Effects in Financial Markets

Financial sector disruptions both here and abroad have been a central concern related to the coming century date change. The smooth and efficient operation of financial markets and the banking sector relies on the extensive use of computers for record keeping, financial accounting, and electronic transactions. Studies by the Federal Reserve and the President's Council on Year 2000 Conversion report that federally insured financial institutions are very well-prepared for the year 2000 date change. Data from banks and financial markets provide additional information on the preparations underway and the magnitude of anticipated Y2K-related disruptions to the financial system.

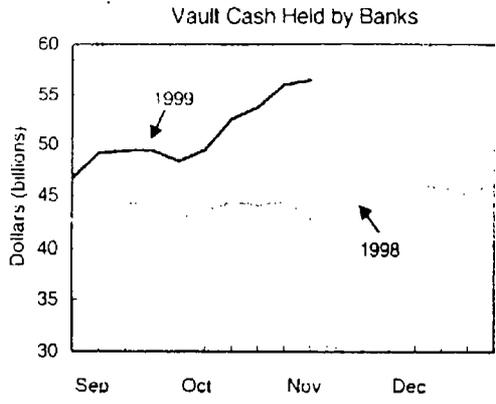
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liquidity will be available at year-end, and partly as a result of a general easing of concerns regarding Y2K-related risks to financial markets, this spread has fallen to about 65 basis points. Other comparable year-end premiums (on fed funds futures and Treasury repurchase agreements) are even smaller. Evidently, market participants generally expect that Y2K disruptions will have only minor repercussions on financial markets.

Banks are building up stockpiles of vault cash. In addition to its role in soothing concerns over year-end liquidity, the Federal Reserve has also acted to ensure that sufficient quantities of cash are available to the public at year-end. It is widely believed that many people intend to withdraw abnormally large amounts of cash near the end of the year as a precaution against Y2K-related failures at banks and ATMs. In anticipation of this rise in demand for cash, the Fed increased the value of its order for currency through September by over 50 percent from the previous year. It has also implemented measures making it easier for banks to order and take delivery of cash. Starting in September, banks began building up their holdings of vault cash, which now stand about 30 percent



higher than at the same time last year (see chart). One of the reasons this build-up started so early is that armored carriers are normally in short supply during the Christmas shopping season. So far, however, public holdings of currency are running at normal levels. Evidently, the public plans to wait until the last minute to get its Y2K cash.

Conclusion. Indications from banks and financial markets suggest that the combined efforts by government agencies and private financial institutions to prepare for Y2K have been successful overall. Financial markets appear to expect relatively minor century-date change disruptions.

ARTICLE

Patents and Innovation in the On-line World

Three recent lawsuits raise the question of how Internet-based companies' ability to patent their business processes would affect on-line competition.

Background. On October 13, priceline.com sued Microsoft for infringing on its patent for a sales mechanism that allows buyers to submit price bids to sellers for airline tickets and other products. Then, on October 21, Amazon.com sued barnesandnoble.com for infringing on its patent for a purchasing method that allows customers to buy products with a single mouse click. Finally, on October 22, Trilogy Software alleged that CarsDirect.com infringed on its patent for a method that allows shoppers to customize their purchases by choosing among a variety of options. These companies might have decided to bring their suits in any case, but the legal environment may also have changed following an appeals court decision last year that some commentators have interpreted as possibly making it easier to patent business processes.

The economics of patents. An Internet company would want to patent a business practice for the same reason that a pharmaceutical company would want to patent a new drug—to gain a competitive advantage. Moreover, without some protection against competitors' simply appropriating an innovation, companies would have little incentive to invest in R&D. Society's decision to offer patent protection involves a trade-off between the costs of granting temporary monopoly power and the benefits from stimulating more innovation. Patents are inappropriate in cases where the costs clearly outweigh the benefits. For example, "natural laws," such as the laws of physics, are not patentable. On economic grounds, this would be justified to the extent that they are so inextricably embedded in a wide variety of innovations that the costs of their being monopolized would most likely be huge. Finer gradations than simply granting or denying a patent are also possible (for example, restricting the scope of a patent based on the novelty of the innovation). Once again, the economic decision is whether the benefits of encouraging innovation outweigh the costs of monopolization.

The case for on-line business process patents. Five years ago, no one sold products on-line. The first electronic commerce companies had to adapt standard business practices like the use of credit cards to the on-line environment. But they also had to develop new solutions to new problems. Amazon.com, for example, developed its patented, streamlined purchasing process, because it believed that it was losing sales by requiring customers to enter billing and credit card information with each purchase. However, such investment may be difficult to protect from imitators without patent protection. One reason is that imitation may be easier in cyber space than it is in the physical world, where other barriers, such as start-up costs, can provide protection even without a patent. For example, the New York Times invested \$350 million for a printing press to print the first

page of the newspaper in color. On-line, the ability to display color graphics is an integrated part of web browsers like Netscape's Navigator and Microsoft's Explorer.

The case against on-line business patents. Ironically, the case for limiting the patenting of on-line business processes draws on many of the same features of e-commerce as the case for expanding the scope of such patents. The fact that all on-line business practices are new means that a large number are potentially patentable. Restricting access to these innovations could seriously hamper the on-line world's famously frenetic pace of innovation and growth and might provide too great an advantage to the early holders of broad patents. In the extreme, it could amount to the physical equivalent of building a fast food restaurant while having to pay one party for the use of a drive-through window, someone else for incorporating a playground, and another for the very idea of running a fast food restaurant.

Finally, even though conventional barriers to entry like start-up costs may be low, the on-line world may have barriers of its own. One might be the importance of reputation. As the number of processes for facilitating sales (such as 1-click shopping) grows, the job of an on-line merchant may well become amalgamating components so as to make accessing the merchant's core product easier. The use of specific processes will become less important than having a reputation for providing an easily accessible site. Gaining a reputation for being the first to develop and incorporate new services might provide a powerful incentive for research and development even in the absence of patent protection.

Conclusion. On-line companies are looking to protect their investments in developing innovative business practices. The challenge for policymakers is to determine whether the unique characteristics of the on-line world call for striking a balance between the costs of granting a temporary monopoly and the gains from stimulating greater innovation that is different from the balance that is embodied in current patent law and practice.

11-29-99

BUSINESS, CONSUMER, AND REGIONAL ROUNDUP

FCC Issues High-Speed Internet Access Decision. Yesterday, the Federal Communications Commission adopted rules to promote competition in providing high-speed Internet access by directing local telephone companies to share their telephone lines with other access providers. This decision will enable competitive carriers to provide Digital Subscriber Line (DSL)-based services over the same telephone lines simultaneously used by the incumbent phone company for basic telephone service, a technique referred to as "line-sharing." Incumbents are already using line sharing technology to offer basic telephone service and DSL services over the same line. Now customers can use an alternative provider of high-speed Internet access without having to purchase a second line. The FCC's Order is intended to ensure that as many companies as possible will be able to deploy new technologies on a faster, more cost-effective basis, and should benefit residential and small business customers.

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Lending to Minority Home Buyers Is up, but So Are Denials. Home-purchase lending to low-income and minority households has expanded faster than lending to other borrowers in recent years, according to a new Federal Reserve study. For example, the number of conventional (non-government backed) home-purchase loans extended to low-income borrowers increased by 75 percent between 1993 and 1998, compared with a 52 percent rise among upper-income borrowers. At the same time, however, an increasing proportion of mortgage applicants, including low-income and minority applicants, have been denied. The study concludes that increased lending for subprime and (especially) manufactured-home mortgages plays a key role in explaining both the increased availability of credit to lower-income borrowers and the recent rise in denial rates for conventional home-purchase loans. (Subprime mortgages are those that exceed the level of credit risk that the government-sponsored enterprises Fannie Mae and Freddie Mac are willing to accept; manufactured homes are assembled in a factory and transported to the purchaser's site.) These mortgages are oriented toward lower-income and relatively less-creditworthy buyers and thus tend to be characterized by higher denial rates. Such mortgages were 14 percent of all conventional home-purchase mortgages in 1998, up from 5 percent in 1993.

EITCs Spread to States and Now to Counties. Last month, Montgomery County, Maryland, enacted what appears to be the first county "EITC" in the nation—a refundable tax credit equal to 10 percent of the Federal EITC. Eight states currently have refundable credits (Colorado, Kansas, Maryland, Massachusetts, Minnesota, New York, Wisconsin, and Vermont) and three states have non-refundable credits (Iowa, Oregon, and Rhode Island). Seven of these 11 states have enacted or expanded their state credits since 1997. Most state credits range in generosity from 5 percent to 27 percent of the Federal EITC, although some offer higher credits in certain circumstances. Families in Wisconsin and Minnesota, for example, may be eligible for credits of up to 43 percent and 46 percent, respectively, of the Federal EITC. States finance their credits mainly through general funds, although states can use their TANF block grant to cover a portion of the cost of refundable credits.

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INTERNATIONAL ROUNDUP

ILO Concludes That Child Labor Can Be Reduced. In a recent report on the achievements of the International Program for the Elimination of Child Labor (IPEC), the International Labor Organization suggests that eliminating child labor is a feasible objective. Major accomplishments of the IPEC include introducing an innovative process of workplace monitoring along with social protection for affected children and their families, intensifying efforts to target the worst forms of child labor, and expanding IPEC in Africa. The report estimates that 130,000 working children directly benefited from the program during 1998-99, including 16 percent who were withdrawn from work or trafficking, 11 percent who were removed from hazardous working conditions, and 20 percent who went into the formal education system. One notable success was a workplace monitoring system introduced in the Bangladesh garment industry in 1995, at a time when 43 percent of factories employed children. By 1998, this percentage had fallen to 5 percent. An estimated 250 million children aged 5 to 14 are engaged in economic activities worldwide. Seventy percent are in the agricultural sector, but the worst injury and illness rates are found in construction, mining, and transport.

Assessing Developing Countries' Telecom Reform. Liberalization of telecommunications policies in developing countries since the 1980s has substantially improved industry performance, and the more radical has been the reform, the greater has been the improvement, according to a recent study. The paper notes that a monopoly is likely to exist, at least temporarily, in the early stages of liberalization, and it advises countries to control monopolistic behavior in order to benefit consumers and the national economy. However, good regulation may be too expensive for some countries. Hence, the study recommends that developing nations create joint regional authorities to regulate telephone companies. This approach would allow the regulator to develop specialized expertise at a scale that a lone developing country cannot afford; it would also allow the regulator to use information about technology, costs, and demand in one country to detect inefficiencies in another country.

U.S. Tax Burden Is Low among OECD Countries. New estimates released by the Organization for Economic Co-operation and Development show that in 1997 the United States continued to have one of the lowest ratios of tax revenues to GDP among OECD countries. Revenues collected at all levels of government were 29.7 percent of GDP in the United States, compared with rates in excess of 45 percent in Sweden, Denmark, Finland, Luxembourg, Belgium, and France. Sweden (51.9 percent) was the lone country whose general government revenue exceeded 50 percent of GDP. Only Mexico, Korea, Turkey, and Japan had tax shares lower than the United States', with Mexico's 16.9 percent the lowest of all. Between 1965 and 1997, revenues as a share of GDP increased from 28 to 42 percent in the European Union 15, compared with a rise from 25 to 28 percent in the North American countries (the United States, Canada, and Mexico).

RELEASES THIS WEEK

U.S. International Trade in Goods and Services

The goods and services trade deficit was \$24.4 billion in September; it was \$23.5 billion in August.

Housing Starts

Housing starts in October were virtually unchanged from September at 1.628 million units at an annual rate. For the first 10 months of 1999, housing starts are 3 percent above the same period a year ago.

Consumer Price Index

The consumer price index increased 0.2 percent in October. Excluding food and energy, consumer prices also rose 0.2 percent.

Industrial Production and Capacity Utilization

The Federal Reserve's index of industrial production increased 0.7 percent in October. Capacity utilization rose 0.3 percentage point to 80.7 percent.

MAJOR RELEASES NEXT WEEK

Advance Durable Shipments and Orders (Tuesday)
Gross Domestic Product (Wednesday)

U.S. ECONOMIC STATISTICS

	1970- 1993	1998	1999:1	1999:2	1999:3
Percent growth (annual rate)					
Real GDP (chain-type)	3.0	4.6	3.7	1.9	4.8
GDP chain-type price index	5.2	1.1	2.0	1.3	1.0
<u>Nonfarm business (NFB) sector:</u>					
Productivity (chain-type)	1.7	3.1	2.7	0.6	4.2
Real compensation per hour:					
Using CPI	1.0	3.9	2.8	1.2	2.2
Using NFB deflator	1.5	4.7	2.9	2.9	4.4
Shares of Nominal GDP (percent)					
Business fixed investment	11.4	12.5	12.6	12.6	12.8
Residential investment	4.5	4.2	4.4	4.5	4.4
Exports	8.2	11.0	10.7	10.7	10.9
Imports	9.2	12.7	12.9	13.4	13.9
Personal saving	6.6	2.6	2.2	1.8	1.5
Federal surplus	-2.8	0.5	1.1	1.3	N.A.
<hr/>					
	1970- 1993	1998	August 1999	September 1999	October 1999
Unemployment Rate (percent)	6.7**	4.5**	4.2	4.2	4.1
Payroll employment (thousands)					
increase per month			129	41	310
increase since Jan. 1993					19794
Inflation (percent per period)					
CPI	5.8	1.6	0.3	0.4	0.2
PPI-Finished goods	5.0	0.0	0.5	1.1	-0.1

**Figures beginning 1994 are not comparable with earlier data.

New or revised data in **boldface**.

FINANCIAL STATISTICS

	1997	1998	September 1999	October 1999	Nov. 18, 1999
Dow-Jones Industrial Average	7441	8626	10714	10397	11036
Interest Rates (percent per annum)					
3-month T-bill	5.06	4.78	4.68	4.86	5.08
10-year T-bond	6.35	5.26	5.92	6.11	6.06
Mortgage rate, 30-year fixed	7.60	6.94	7.82	7.85	7.69
Prime rate	8.44	8.35	8.25	8.25	8.50

INTERNATIONAL STATISTICS

Exchange Rates	Current level	Percent Change from	
	November 18, 1999	Week ago	Year ago
Euro (in U.S. dollars)	1.030	-1.3	N.A.
Yen (per U.S. dollar)	105.9	1.2	-12.8
Major currencies index (Mar. 1973=100) (trade-weighted value of the U.S. \$)	93.16	0.6	-0.6

International Comparisons "	Real GDP growth	Unemployment rate	CPI inflation
	(percent change last 4 quarters)	(percent)	(percent change in index last 12 months)
United States	4.1 (Q3)	4.1 (Oct)	2.6 (Oct)
Canada	3.7 (Q2)	7.5 (Sep)	2.5 (Sep)
Japan	0.9 (Q2)	4.7 (Sep)	-0.2 (Sep)
France	2.1 (Q2)	11.0 (Sep)	0.7 (Sep)
Germany	0.6 (Q2)	9.1 (Sep) ^{2/}	0.6 (Sep)
Italy	0.8 (Q2)	12.1 (Apr)	1.8 (Sep)
United Kingdom	1.8 (Q3)	5.9 (Jul)	1.1 (Sep)

1/ For unemployment data, rates approximating U.S. concepts as calculated by the U.S. Department of Labor, Bureau of Labor Statistics.

2/ Rate for unified Germany.

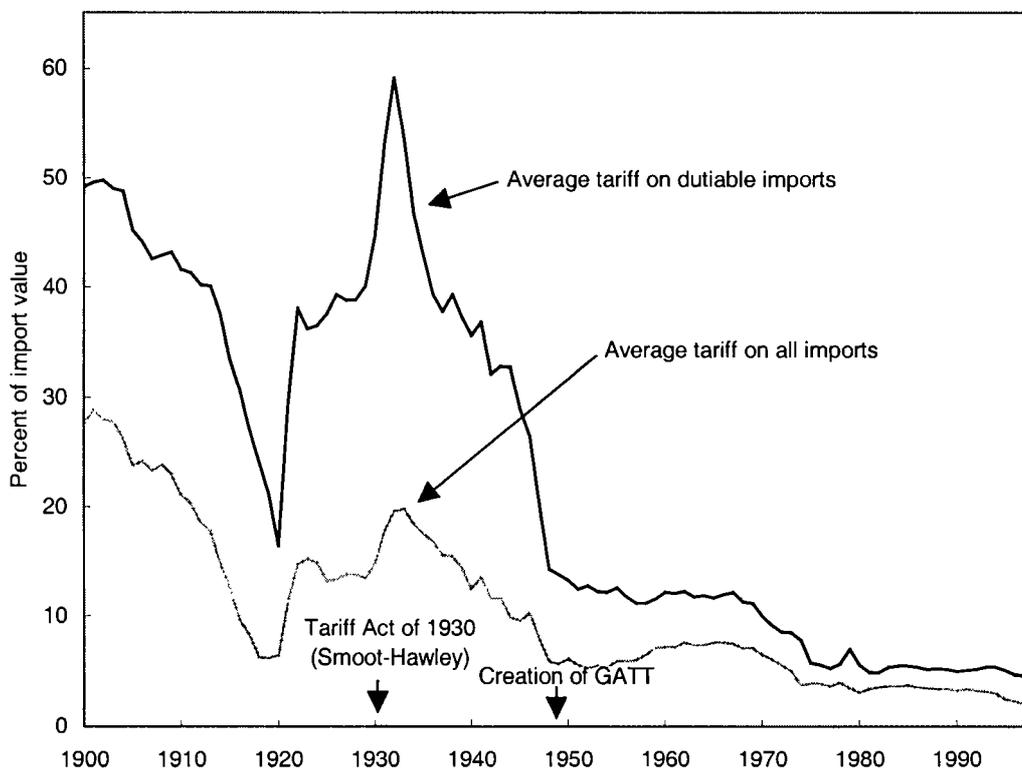
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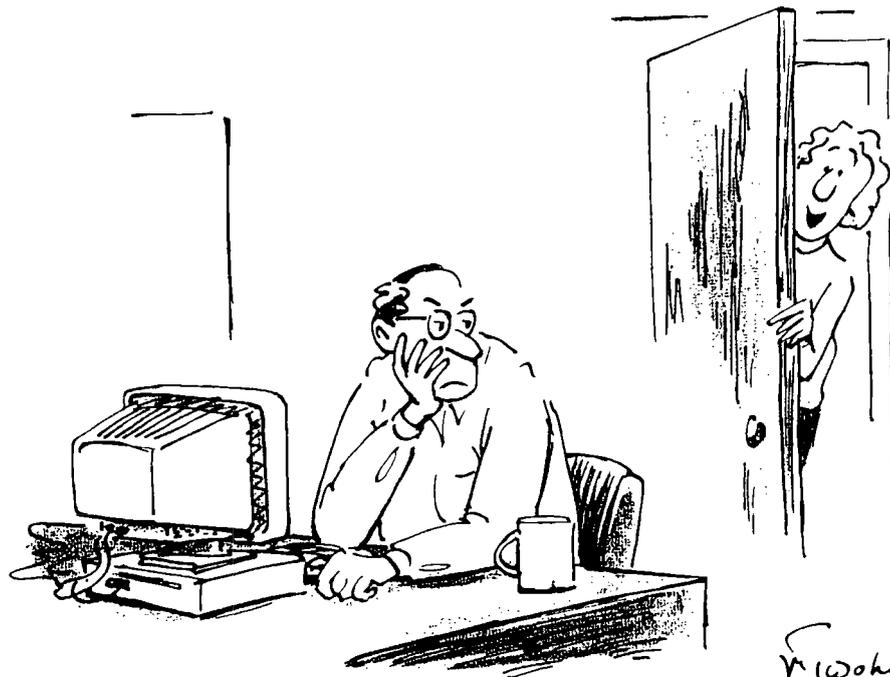
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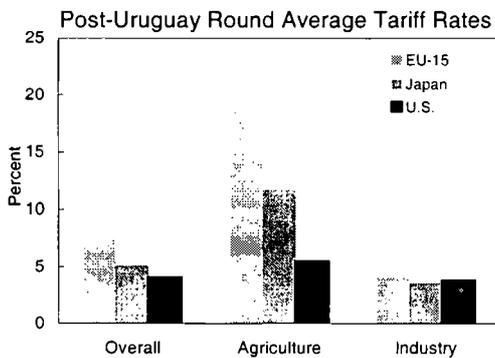
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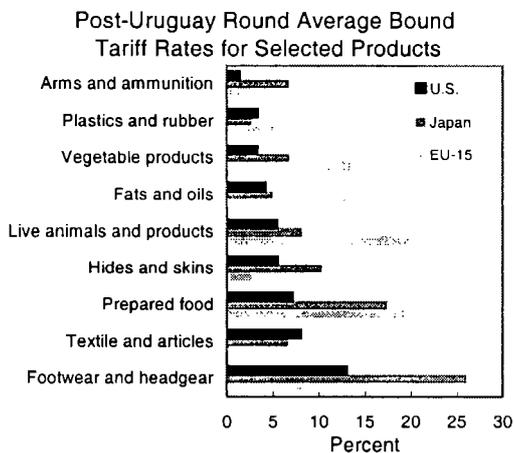
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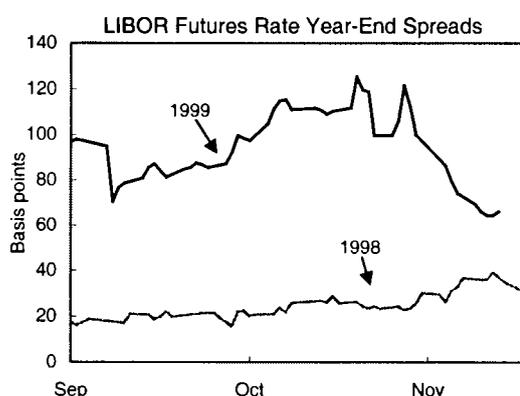
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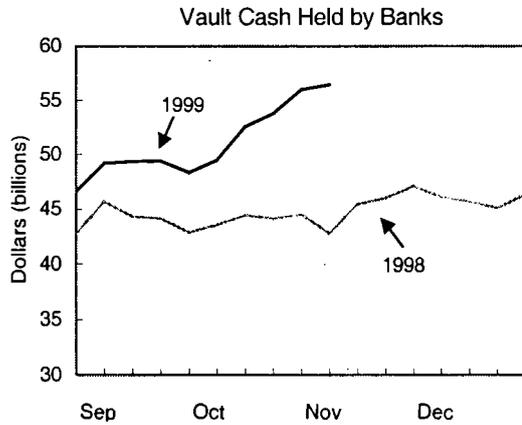
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liquidity will be available at year-end, and partly as a result of a general easing of concerns regarding Y2K-related risks to financial markets, this spread has fallen to about 65 basis points. Other comparable year-end premiums (on fed funds futures and Treasury repurchase agreements) are even smaller. Evidently, market participants generally expect that Y2K disruptions will have only minor repercussions on financial markets.

Banks are building up stockpiles of vault cash. In addition to its role in soothing concerns over year-end liquidity, the Federal Reserve has also acted to ensure that sufficient quantities of cash are available to the public at year-end. It is widely believed that many people intend to withdraw abnormally large amounts of cash near the end of the year as a precaution against Y2K-related failures at banks and ATMs. In anticipation of this rise in demand for cash, the Fed increased the value of its order for currency through September by over 50 percent from the previous year. It has also implemented measures making it easier for banks to order and take delivery of cash. Starting in September, banks began building up their holdings of vault cash, which now stand about 30 percent



higher than at the same time last year (see chart). One of the reasons this build-up started so early is that armored carriers are normally in short supply during the Christmas shopping season. So far, however, public holdings of currency are running at normal levels. Evidently, the public plans to wait until the last minute to get its Y2K cash.

Conclusion. Indications from banks and financial markets suggest that the combined efforts by government agencies and private financial institutions to prepare for Y2K have been successful overall. Financial markets appear to expect relatively minor century-date change disruptions.

ARTICLE

Patents and Innovation in the On-line World

Three recent lawsuits raise the question of how Internet-based companies' ability to patent their business processes would affect on-line competition.

Background. On October 13, priceline.com sued Microsoft for infringing on its patent for a sales mechanism that allows buyers to submit price bids to sellers for airline tickets and other products. Then, on October 21, Amazon.com sued barnesandnoble.com for infringing on its patent for a purchasing method that allows customers to buy products with a single mouse click. Finally, on October 22, Trilogy Software alleged that CarsDirect.com infringed on its patent for a method that allows shoppers to customize their purchases by choosing among a variety of options. These companies might have decided to bring their suits in any case, but the legal environment may also have changed following an appeals court decision last year that some commentators have interpreted as possibly making it easier to patent business processes.

The economics of patents. An Internet company would want to patent a business practice for the same reason that a pharmaceutical company would want to patent a new drug—to gain a competitive advantage. Moreover, without some protection against competitors' simply appropriating an innovation, companies would have little incentive to invest in R&D. Society's decision to offer patent protection involves a trade-off between the costs of granting temporary monopoly power and the benefits from stimulating more innovation. Patents are inappropriate in cases where the costs clearly outweigh the benefits. For example, "natural laws," such as the laws of physics, are not patentable. On economic grounds, this would be justified to the extent that they are so inextricably embedded in a wide variety of innovations that the costs of their being monopolized would most likely be huge. Finer gradations than simply granting or denying a patent are also possible (for example, restricting the scope of a patent based on the novelty of the innovation). Once again, the economic decision is whether the benefits of encouraging innovation outweigh the costs of monopolization.

The case for on-line business process patents. Five years ago, no one sold products on-line. The first electronic commerce companies had to adapt standard business practices like the use of credit cards to the on-line environment. But they also had to develop new solutions to new problems. Amazon.com, for example, developed its patented, streamlined purchasing process, because it believed that it was losing sales by requiring customers to enter billing and credit card information with each purchase. However, such investment may be difficult to protect from imitators without patent protection. One reason is that imitation may be easier in cyber space than it is in the physical world, where other barriers, such as start-up costs, can provide protection even without a patent. For example, the New York Times invested \$350 million for a printing press to print the first

page of the newspaper in color. On-line, the ability to display color graphics is an integrated part of web browsers like Netscape's Navigator and Microsoft's Explorer.

The case against on-line business patents. Ironically, the case for limiting the patenting of on-line business processes draws on many of the same features of e-commerce as the case for expanding the scope of such patents. The fact that all on-line business practices are new means that a large number are potentially patentable. Restricting access to these innovations could seriously hamper the on-line world's famously frenetic pace of innovation and growth and might provide too great an advantage to the early holders of broad patents. In the extreme, it could amount to the physical equivalent of building a fast food restaurant while having to pay one party for the use of a drive-through window, someone else for incorporating a playground, and another for the very idea of running a fast food restaurant.

Finally, even though conventional barriers to entry like start-up costs may be low, the on-line world may have barriers of its own. One might be the importance of reputation. As the number of processes for facilitating sales (such as 1-click shopping) grows, the job of an on-line merchant may well become amalgamating components so as to make accessing the merchant's core product easier. The use of specific processes will become less important than having a reputation for providing an easily accessible site. Gaining a reputation for being the first to develop and incorporate new services might provide a powerful incentive for research and development even in the absence of patent protection.

Conclusion. On-line companies are looking to protect their investments in developing innovative business practices. The challenge for policymakers is to determine whether the unique characteristics of the on-line world call for striking a balance between the costs of granting a temporary monopoly and the gains from stimulating greater innovation that is different from the balance that is embodied in current patent law and practice.

BUSINESS, CONSUMER, AND REGIONAL ROUNDUP

FCC Issues High-Speed Internet Access Decision. Yesterday, the Federal Communications Commission adopted rules to promote competition in providing high-speed Internet access by directing local telephone companies to share their telephone lines with other access providers. This decision will enable competitive carriers to provide Digital Subscriber Line (DSL)-based services over the same telephone lines simultaneously used by the incumbent phone company for basic telephone service, a technique referred to as "line-sharing." Incumbents are already using line sharing technology to offer basic telephone service and DSL services over the same line. Now customers can use an alternative provider of high-speed Internet access without having to purchase a second line. The FCC's Order is intended to ensure that as many companies as possible will be able to deploy new technologies on a faster, more cost-effective basis, and should benefit residential and small business customers.

Lending to Minority Home Buyers Is up, but So Are Denials. Home-purchase lending to low-income and minority households has expanded faster than lending to other borrowers in recent years, according to a new Federal Reserve study. For example, the number of conventional (non-government backed) home-purchase loans extended to low-income borrowers increased by 75 percent between 1993 and 1998, compared with a 52 percent rise among upper-income borrowers. At the same time, however, an increasing proportion of mortgage applicants, including low-income and minority applicants, have been denied. The study concludes that increased lending for subprime and (especially) manufactured-home mortgages plays a key role in explaining both the increased availability of credit to lower-income borrowers and the recent rise in denial rates for conventional home-purchase loans. (Subprime mortgages are those that exceed the level of credit risk that the government-sponsored enterprises Fannie Mae and Freddie Mac are willing to accept; manufactured homes are assembled in a factory and transported to the purchaser's site.) These mortgages are oriented toward lower-income and relatively less-creditworthy buyers and thus tend to be characterized by higher denial rates. Such mortgages were 14 percent of all conventional home-purchase mortgages in 1998, up from 5 percent in 1993.

EITCs Spread to States and Now to Counties. Last month, Montgomery County, Maryland, enacted what appears to be the first county "EITC" in the nation—a refundable tax credit equal to 10 percent of the Federal EITC. Eight states currently have refundable credits (Colorado, Kansas, Maryland, Massachusetts, Minnesota, New York, Wisconsin, and Vermont) and three states have non-refundable credits (Iowa, Oregon, and Rhode Island). Seven of these 11 states have enacted or expanded their state credits since 1997. Most state credits range in generosity from 5 percent to 27 percent of the Federal EITC, although some offer higher credits in certain circumstances. Families in Wisconsin and Minnesota, for example, may be eligible for credits of up to 43 percent and 46 percent, respectively, of the Federal EITC. States finance their credits mainly through general funds, although states can use their TANF block grant to cover a portion of the cost of refundable credits.

INTERNATIONAL ROUNDUP

ILO Concludes That Child Labor Can Be Reduced. In a recent report on the achievements of the International Program for the Elimination of Child Labor (IPEC), the International Labor Organization suggests that eliminating child labor is a feasible objective. Major accomplishments of the IPEC include introducing an innovative process of workplace monitoring along with social protection for affected children and their families, intensifying efforts to target the worst forms of child labor, and expanding IPEC in Africa. The report estimates that 130,000 working children directly benefited from the program during 1998-99, including 16 percent who were withdrawn from work or trafficking, 11 percent who were removed from hazardous working conditions, and 20 percent who went into the formal education system. One notable success was a workplace monitoring system introduced in the Bangladesh garment industry in 1995, at a time when 43 percent of factories employed children. By 1998, this percentage had fallen to 5 percent. An estimated 250 million children aged 5 to 14 are engaged in economic activities worldwide. Seventy percent are in the agricultural sector, but the worst injury and illness rates are found in construction, mining, and transport.

Assessing Developing Countries' Telecom Reform. Liberalization of telecommunications policies in developing countries since the 1980s has substantially improved industry performance, and the more radical has been the reform, the greater has been the improvement, according to a recent study. The paper notes that a monopoly is likely to exist, at least temporarily, in the early stages of liberalization, and it advises countries to control monopolistic behavior in order to benefit consumers and the national economy. However, good regulation may be too expensive for some countries. Hence, the study recommends that developing nations create joint regional authorities to regulate telephone companies. This approach would allow the regulator to develop specialized expertise at a scale that a lone developing country cannot afford; it would also allow the regulator to use information about technology, costs, and demand in one country to detect inefficiencies in another country.

U.S. Tax Burden Is Low among OECD Countries. New estimates released by the Organization for Economic Co-operation and Development show that in 1997 the United States continued to have one of the lowest ratios of tax revenues to GDP among OECD countries. Revenues collected at all levels of government were 29.7 percent of GDP in the United States, compared with rates in excess of 45 percent in Sweden, Denmark, Finland, Luxembourg, Belgium, and France. Sweden (51.9 percent) was the lone country whose general government revenue exceeded 50 percent of GDP. Only Mexico, Korea, Turkey, and Japan had tax shares lower than the United States', with Mexico's 16.9 percent the lowest of all. Between 1965 and 1997, revenues as a share of GDP increased from 28 to 42 percent in the European Union 15, compared with a rise from 25 to 28 percent in the North American countries (the United States, Canada, and Mexico).

RELEASES THIS WEEK

U.S. International Trade in Goods and Services

The goods and services trade deficit was \$24.4 billion in September; it was \$23.5 billion in August.

Housing Starts

Housing starts in October were virtually unchanged from September at 1.628 million units at an annual rate. For the first 10 months of 1999, housing starts are 3 percent above the same period a year ago.

Consumer Price Index

The consumer price index increased 0.2 percent in October. Excluding food and energy, consumer prices also rose 0.2 percent.

Industrial Production and Capacity Utilization

The Federal Reserve's index of industrial production increased 0.7 percent in October. Capacity utilization rose 0.3 percentage point to 80.7 percent.

MAJOR RELEASES NEXT WEEK

Advance Durable Shipments and Orders (Tuesday)
Gross Domestic Product (Wednesday)

U.S. ECONOMIC STATISTICS

	1970- 1993	1998	1999:1	1999:2	1999:3
Percent growth (annual rate)					
Real GDP (chain-type)	3.0	4.6	3.7	1.9	4.8
GDP chain-type price index	5.2	1.1	2.0	1.3	1.0
<u>Nonfarm business (NFB) sector:</u>					
Productivity (chain-type)	1.7	3.1	2.7	0.6	4.2
Real compensation per hour:					
Using CPI	1.0	3.9	2.8	1.2	2.2
Using NFB deflator	1.5	4.7	2.9	2.9	4.4
Shares of Nominal GDP (percent)					
Business fixed investment	11.4	12.5	12.6	12.6	12.8
Residential investment	4.5	4.2	4.4	4.5	4.4
Exports	8.2	11.0	10.7	10.7	10.9
Imports	9.2	12.7	12.9	13.4	13.9
Personal saving	6.6	2.6	2.2	1.8	1.5
Federal surplus	-2.8	0.5	1.1	1.3	N.A.
<hr/>					
	1970- 1993	1998	August 1999	September 1999	October 1999
Unemployment Rate (percent)	6.7**	4.5**	4.2	4.2	4.1
Payroll employment (thousands)					
increase per month			129	41	310
increase since Jan. 1993					19794
Inflation (percent per period)					
CPI	5.8	1.6	0.3	0.4	0.2
PPI-Finished goods	5.0	0.0	0.5	1.1	-0.1

**Figures beginning 1994 are not comparable with earlier data.

New or revised data in **boldface**.

FINANCIAL STATISTICS

	1997	1998	September 1999	October 1999	Nov. 18, 1999
Dow-Jones Industrial Average	7441	8626	10714	10397	11036
Interest Rates (percent per annum)					
3-month T-bill	5.06	4.78	4.68	4.86	5.08
10-year T-bond	6.35	5.26	5.92	6.11	6.06
Mortgage rate, 30-year fixed	7.60	6.94	7.82	7.85	7.69
Prime rate	8.44	8.35	8.25	8.25	8.50

INTERNATIONAL STATISTICS

Exchange Rates	Current level	Percent Change from	
	November 18, 1999	Week ago	Year ago
Euro (in U.S. dollars)	1.030	-1.3	N.A.
Yen (per U.S. dollar)	105.9	1.2	-12.8
Major currencies index (Mar. 1973=100) (trade-weighted value of the U.S. \$)	93.16	0.6	-0.6

International Comparisons ^v	Real GDP growth	Unemployment rate	CPI inflation
	(percent change last 4 quarters)	(percent)	(percent change in index last 12 months)
United States	4.1 (Q3)	4.1 (Oct)	2.6 (Oct)
Canada	3.7 (Q2)	7.5 (Sep)	2.5 (Sep)
Japan	0.9 (Q2)	4.7 (Sep)	-0.2 (Sep)
France	2.1 (Q2)	11.0 (Sep)	0.7 (Sep)
Germany	0.6 (Q2)	9.1 (Sep) ^{2/}	0.6 (Sep)
Italy	0.8 (Q2)	12.1 (Apr)	1.8 (Sep)
United Kingdom	1.8 (Q3)	5.9 (Jul)	1.1 (Sep)

1/ For unemployment data, rates approximating U.S. concepts as calculated by the U.S. Department of Labor, Bureau of Labor Statistics.

2/ Rate for unified Germany.