Securities: The New World Wealth Machine

by John C. Edmunds

Securitization—the issuance of high-quality bonds and stocks—has become the most powerful engine of wealth creation in today's world economy. Financial securities have grown to the point that they are now worth more than a year's worldwide output of goods and services, and soon they will be worth more than two years' output. While politicians concentrate on trade balances and intellectual property rights, these financial instruments are the leading component of global wealth today as well as its fastest-growing generator. Overall, securitization is fundamentally altering the international economic system.

Historically, manufacturing, exporting, and direct investment produced prosperity through income creation. Wealth was created when a portion of income was diverted from consumption into investment in buildings, machinery, and technological change. Societies accumulated wealth slowly over generations. Now many societies, and indeed the entire world, have learned how to create wealth directly. The new approach requires that a state find ways to increase the *market value* of its stock of productive assets. Several countries have successfully directed their economic policies toward that goal, achieving and sustaining faster growth rates than were once thought possible.

To understand the significance of this shift, one must first under-

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stand the basics of how securities markets work. A country's stock of businesses, farms, and other income-producing properties (known as "capital stock") has a market value. The market value is the total price paid if the entire capital stock were sold. The price that each income-producing property brings within that stock depends on several factors: the number of bidders, the real rate of return on that country's capital, the forecasted growth rate of earnings coming from the asset, and the relative ease with which a new owner will benefit from the stream of earnings coming from the asset.

The market value of a country's capital stock can be up to five times the value of its annual output of goods and services—as it was in Japan during the late 1980s—or it can be close to zero. An economic policy that aims to achieve growth by wealth creation therefore does not attempt to increase the production of goods and services, except as a secondary objective.

The value of a manufacturing company, an electric power plant, or a toll road is the price it will bring in the financial market. Investors pay higher prices for ownership rights that have wide appeal to potential buyers. A productive enterprise's listing of shares on the national stock exchange makes the shares easy to buy and sell and establishes the company's value. The liquidity makes the shares acceptable to banks as collateral for loans. Listing the shares gives some protection against abuses, which raises the value of the shares.

Nowadays, wealth is created when the managers of a business enterprise give high priority to rewarding the shareholders and bondholders. The greater the rewards, the more the shares and bonds are likely to be worth in the financial market. If compensating shareholders and bondholders is a low priority, the market value of the enterprise's securities tends to remain low.

Wealth is also created when money, foreign or domestic, flows into the capital market of a country and raises the value of its quoted securities. If foreign investors think they will earn high returns in a specific national market, they will move more money into it. The new money competes for underpriced assets, which drives up their prices and raises the value of the country's currency. Investors profit from both. Money flowing into a country's capital market benefits unquoted business enterprises, capital assets, and the income of the skilled labor force while providing the potential for massive windfall gains to the owners of enterprises, including the government. Virtu-

ally everything with economic value in the country is repriced upward with incoming investment.

Creating Securities

There is a worldwide shortage of investment-grade securities. This fact is evident when one considers that while the total face amount of U.S. Treasury securities jumped from $1.1 trillion in 1982 to $5 trillion in 1996, the market value of each individual bond rose. Thus, the total amount of money dedicated to owning those securities rose from less than $1.1 trillion to more than $5 trillion. The increase in the supply of Treasury securities was too small to satisfy the demand, so prices rose. Although interest rates declined during this period, the price increases support the notion that there is a chronic shortage of investment-grade securities.

Creating new investment-grade securities is easy as long as there are income-producing properties that are without liens or encumbrances. Both bonds and common stock can be collateralized by any asset that has a value in the marketplace or may have future market value.

The total dollar value of all investment-grade securities worldwide that could potentially be issued is upward of $150 trillion, roughly five times the value of annual world output. The value of all quoted securities was $35 trillion at the end of 1992. This value will approach $60 trillion by late 1996 and surpass $83 trillion by the year 2000. Therefore, only 40 per cent of these securities have been issued so far. More are being issued every business day, and their value on the whole is increasing.

The bulk of new securities offerings will likely be in government bonds, stocks and industrial bonds issued to finance new infrastructure projects, and shares issued in privatizations of government-held property. Additionally, initial public offerings of new high-technology companies and secondary offerings floated by existing publicly traded companies will be made. The total new issuance slated for the next 18 months is in the area of $200 billion per month. Price increases should account for the rest of the increase in the value of listed securities.

A decade ago the number of people worldwide who were able to save, or who were considered middle class, was less than 1 billion.

Now that number is estimated to be between 1.5 and 2 billion. If Brazil, China, India, and Indonesia continue their rapid economic growth, the number may soon surpass 2.5 billion. The total amount this global middle class has been able to save is rapidly approaching $30 trillion, roughly four times U.S. gross domestic product (GDP).

Members of the middle class buy stocks and bonds and hold them through indirect forms of ownership. Worldwide, this group is putting its savings into private pension accounts and mutual funds. The nation-state's resources are inadequate to pay for the health care and retirement needs of aging populations, so individuals have increasingly taken steps to secure their comfortable retirement.

Many societies have learned how to create wealth directly. The new approach requires that a state find ways to increase the *market value* of its stock of productive assets.

Earlier saving models are in relative decline. The value of listed securities is rising much faster than the value of traditional savings vehicles like farmland, cattle, gold coins, and jewelry. The advantages of listed securities are excellent liquidity and good rates of return, adjusted for inflation and the investment's risk. The first advantage makes the new mode superior to real estate and the second makes it superior to precious metals and tangibles in general. Recent measures taken in emerging countries to provide protection from taxation, devaluation, and hyperinflation are obvious advantages to investors there.

The aggregate figures for the total amount invested in private pension accounts and mutual funds are impressive; the world's 300 largest pension funds grew by 14.3 per cent in 1993 and by similar amounts in 1994 and 1995. The total worldwide value of listed stocks and bonds grew from $5 trillion in 1980 to $35 trillion by year-end 1992. Total world pension assets amounted to $6.9 trillion at year-end 1993 and are projected to grow to $10.3 trillion by 1998.

Mutual funds in the United States grew to $2.8 trillion as of year-

end 1995. In Europe, where private pension funds are gaining market share from state social security systems, fund growth is equally impressive: These funds grew from $1.6 trillion in 1993 to $2.1 trillion as of January 1996. In Asia, the emergence of private pension funds is still more recent, and these funds are growing even more quickly. For example, in Hong Kong, company pension plans are growing at 20 to 30 per cent per year and will reach full provision for employee retirement needs by 1998. In Australia, private pension assets of $147 billion are slated to triple by the end of the decade. Elsewhere in the world, the pattern is even newer but is very quickly making up for lost time. Bolivia, Chile, Ecuador, and Peru have pension schemes that channel as much as 40 per cent of GDP each year into stocks and bonds issued by private companies.

THE NEW MODE OF OWNERSHIP

Historically, stocks and bonds were owned by individuals who knew the managers of the issuing companies and were therefore more inclined to be tolerant of erratic performance. As institutions became a force in the securities markets, ownership became indirect. Now companies issuing stocks and bonds get little sympathy from institutional investors if performance is disappointing. Investment decisions are made largely by professionals working on behalf of the owners, who are largely middle-class individuals saving for their retirement or their children's education.

This new mode of ownership can yield higher average returns. Professional managers face pressure from millions of investors to perform well. If they do not, investors may switch portfolios at a moment's notice. In all the stock markets around the world, the volume traded is growing faster than the value of total listed securities. Thus, the trend is toward faster portfolio turnover.

This pressure to perform reaches the portfolio manager first and then affects the managers of issuing companies. Portfolio managers once refrained from communicating with the managers of issuing companies, but they now speak with clarity and eloquence from a position of expertise and power. The pressure they put on the managers of issuing companies is fiercer than what can be exerted by the thousands of individual owners of the company's securities. Professional portfolio managers in effect hold the proxies of the owners.

Offshore financial intermediation has helped make the new mode of investment available in countries that previously did not allow it. For decades, Swiss banks and the Euromarkets have offered a refuge from negative returns, but many middle-class savers were unable to put money offshore, because it was either illegal or too difficult to arrange. That is no longer true. As a result, national financial markets must be efficient, and the range of products they offer must be competitive.

Middle-class Americans are shifting their savings from hometown banks to Wall Street. They have earned higher returns by investing in mutual funds, and the street that was once the haven for high net-worth individuals is now wooing the masses.

However, not everyone is enjoying these gains. Many American companies that perform well in the financial markets have done so at a price. Restructuring and downsizing, undertaken to increase shareholder wealth, are welcomed by investors as signals of good performance, though they leave people out of work. Unemployed workers cannot afford mutual or pension fund investing; neither can the poor or anyone unable to save. Thus, wealth becomes concentrated among those who own financial investments. There is a danger that a wedge will be created between those Americans who have investments and those who do not.

In the past, most middle-class investors had little choice but to suffer the loss of their savings when their government made policy errors. The wealthy could get some money out of the country, but it was difficult and costly. Middle-class investors now diversify internationally and demand performance. They can quickly and easily shift their holdings between currencies, industry sectors, and countries. International diversification is available to hundreds of millions of people. Controls remain in effect in India and China but are ending in other emerging countries with burgeoning middle classes.

International mutual funds capture the high average yields of stock markets around the world, while cushioning investors against the volatility of any one national stock market. These funds make it easy and relatively safe for middle-class savers to invest. Technical matters, like custody and foreign currency conversion, are managed inexpensively by the back offices of major securities firms.

Investors who diversify internationally are timid at first but quickly become confident and demanding. They have easy access to information, and they form opinions of how portfolio managers should al-

locate newly invested money.

The less obvious risks of cross-border investing are being neutralized. Disclosure requirements have vastly expanded in the past five years. Companies are dropping local in favor of international auditing firms. Inefficient national stock markets are being circumvented as firms that want to sell shares internationally cross-list them on major stock exchanges, where liquidity is greater and transaction costs are lower.

The steady flow of new cross-listings in London and New York makes it easier for investors to buy shares of top-quality companies headquartered in countries where stock markets are still small and inefficient. When a company headquartered in an emerging country lists its stock in London or New York, it follows guidelines that make an evaluation of the company's performance possible. At first, the value of the newly listed shares goes up, because they had been undervalued. The market for the shares broadens, and then the pressure to perform intensifies and crosses national boundaries. The company must perform well consistently, or its stock price may fall.

The international investment environment has benefited from less governmental oversight. Most countries used to regulate international transactions. Citizens were prohibited from owning foreign bank accounts. Foreign currencies were available only in limited quantities, rationed by the central bank for approved purposes. Informal markets for foreign currency were pushed into the shadows. Now most central banks have abandoned any hope of controlling international transactions. They can get foreign exchange only by paying a fair price for it.

Governments were reluctant to give up control of foreign exchange, but most now understand the importance of correctly priced currency. Foreign investors will buy a correctly priced currency, not an overvalued one. Moreover, investors will buy securities denominated in a fairly priced currency. So the policy of allowing a free market in foreign currency can and does increase the amount of foreign currency in the country.

Pricing the currency correctly is not the only step needed to attract capital, however. Removing exit restrictions is also necessary. Investors will not place investments in a country unless they can pull out when they want to—and without paying an exorbitant exit fee. In addition, if they can place investments without paying an exces-

sive entry fee and earn an attractive rate of return, they will likely do so.

Under some circumstances, however, governments can enact restrictions that suit their financial objectives. For example, Chile imposed a restriction that forced foreign portfolio investment to be congruous with Chile's objective of stability. Chile required portfolio investors to leave money in for one year. "Hot money" could not enter one day and leave in a panic the next. This restriction put short-horizon investors on notice that their money was not welcome. Any country can decide to impose such requirements unilaterally. The time to do it is when foreign-exchange reserves are high and when investment opportunities in the country are already attracting net inflows of cash.

Securitization is the packaging and sale of tradable claims on income-producing properties. Central banks, governments, and business groups must create securities collateralized by assets that produce steady cash flows in order to get foreign investors to buy. Securities from government bonds to telephone company shares have been offered successfully. Once securitization begins, it quickly gains supporters.

The Taiwanese stock market is an example of securitization rapidly creating value. Total market capitalization of the Taiwanese stock market was $15.4 billion in 1986. It had risen to $101.1 billion by year-end 1992—an annual growth rate of 44 per cent per year in U.S. dollars. The real growth rate of the Taiwanese economy, which reached 7.6 per cent in 1989, was never as high as 10 per cent for any year during the period. The dramatic increase in value was due to new securities listings, appreciation of the new Taiwanese currency, and upward price moves for existing securities.

The Stampede to Securitize Assets

Securitization has massively broadened the market for income-producing assets by separating ownership from management. Buyers no longer have to be able to manage the assets they own. In addition, thanks to financial disclosure requirements, auditing standards, and securities market regulation, they generally do not have to fear being defrauded.

The world's businesses and capital assets are far more securitized than before. The current dollar value of total world annual output is

likely more than $30 trillion. The dollar value of global unsecuritized income-producing assets is approximately $90 trillion. If securitized, the value of these assets could approach $150 trillion. Thus, an income-producing asset is worth about three times the value of its annual gross output if it is not securitized and five times the value if it is securitized.[1] The total value of listed stocks and bonds in the world is likely approaching $60 trillion. This means that today only 40 per cent of world income-producing assets are securitized.

Securitized assets are worth more than the "lumpy" assets that collateralize them, partly because they are more liquid. Shares trade daily and are easy to buy and sell. Buildings, factories, and farms are harder to sell, so buyers take that into account by paying less for them. Securities trade at a higher multiple of cash flow than unsecuritized businesses.

The differences between the multiples can be narrow or wide. In many emerging countries, there are many businesses for sale, but there are not enough good-quality stocks and bonds. In this situation, common stocks might sell at eight times cash flow, versus five times cash flow for whole businesses. The market would be signaling that the demand for good-quality securities exceeds the supply. As long as stocks and bonds command a premium over the value of the assets that collateralize them, the pressure to securitize will continue.

A business that would bring $10 million in a private sale could bring as much as $20 million if sold via the stock market. The owner can sometimes sell half the shares on the stock exchange for $10 million and still keep control. If the company prospers, or if the stock market goes up, the half that still belongs to the original owner could be worth even $15 million. After the shares are listed, they become excellent collateral for loans, allowing the original owner to borrow perhaps $7 million against the half he still owns, while retaining control of the business.

Securitization generates equally dramatic profits at the national level. The macro effect is to increase the market value of income-producing assets in the country, including those that have not yet been securitized. The assets that are not securitized could be bought by companies that have already listed their shares on the stock ex-

[1] *This calculation is based on current market indices and capitalization estimates by economist Paul Samuelson.*

change. A company that has earnings of $5 million per year and a price/earnings ratio of 15 would have common stock worth $75 million on the stock exchange. That company could buy a closely held business that earns $1 million per year and pay $9 million for it—a price/earnings ratio of only 9 due to the illiquidity. The newly purchased business, if consolidated with the existing business, creates a company earning $6 million per year, with common stock worth $90 million, or 15 times earnings. The company would have added $15 million to the value of its stock with the $9 million purchase.

Further value at the country level occurs when a country proactively seeks to attract portfolio investment. The first successful securitization begets the next. Computer networks provide information about newly listed securities and allow the ranking of securities according to price versus growth and income potential. Some computer programs allow investors to combine securities into hypothetical portfolios, thereby simulating performance. With automated tracking, any listed security that is slightly underpriced is bought until its price moves up in line with its income and growth potential. The supply of new securities is absorbed as buyers from outside the country push up prices that are too low by international standards.

With international buying comes foreign exchange and currency appreciation, which increases the value of every cash income stream and enriches the country's population. It may improve the balance of payments and allow the government to fund more projects.

Wealth Creation via Securitization

Securitization is creating massive wealth globally. The world economy is thought to be doing well if it grows by 2.5 per cent per year. During the1980s, there were three years when it grew less than that, and for the rest of the decade, it rose an average of 3.6 per cent per year. If world output is roughly $30 trillion per year, a 2.5 per cent increase amounts to $750 billion, or about $130 per person. This output-based increase might seem adequate, but it is small compared with the increase in wealth that securitization could generate.

As mentioned, the world's income-producing assets are approximately 40 per cent securitized today. How much value would an increase of, say, 5 per cent generate? The 40 per cent figure means that assets producing $12 trillion worth of goods and services annually

are already securitized, and assets producing another $18 trillion worth of goods and services are not. In order for the 40 per cent securitization figure to rise to 45 per cent, assets producing $1.5 trillion worth of goods and services would have to be securitized. The assets that would be newly securitized would be worth $4.5 trillion unsecuritized and $7.5 trillion securitized. The value created through securitization would therefore be $3 trillion. This comes to about $525 per person, or more than three times as much as the $130 increase provided by a 2.5 per cent growth rate.

If the global securitization rate increased to, say, 75 per cent immediately, the wealth creation would come to $3,684 per person, an enormous amount given that world annual output amounts to $5,265 per person. The potential gain from securitization is over half of a year's income for every person on earth and more than the increase in income achieved during the past decade. Bluntly, the potential gain is an order of magnitude larger than a year's normal growth.

The cost of bad news is immense in terms of lost value in stock and bond markets. Hundreds of billions of dollars can be lost in a matter of hours or days.

Many of these gains take place as international portfolio managers anticipate which events will raise the value of income-producing properties. If they are confident that an event will happen, they bid up the price before it occurs. An example is when a country's foreign debt is converted into so-called Brady bonds, which are U.S. Treasury securities—named for former U.S. Treasury secretary Nicholas Brady—that are issued to refinance the sovereign debts of emerging countries. Poland's foreign debt was cut in half when it was restructured to include Brady bonds, indicating investors' confidence in the emerging Polish market. This debt reduction in turn allowed the Polish economy to grow faster, yielding more positive returns. Another example is ITT, whose share price rose in 1995 amid rumors of a breakup into three groups, each with a clearer position in the stock market. When an event is sure to raise prices, it is safe to buy ahead of the event, and in some cases it is necessary to pay a large part of

the premium before the event happens.

Finland became a full member of the European Union on January 1, 1995. When its economy unified with that of Europe, its currency benefited from the European monetary umbrella. This meant that the income streams of its assets could be hedged or converted into German marks at a lower cost. Hence, its income streams were viewed as German mark income streams. Finnish companies obtained freer access to the European market. The index of stock prices in the Finnish stock market rose 51 per cent in dollars during 1994, the 12 months immediately preceding the unification. Investors paid more for shares of Finnish companies because of the unification, and they paid it before the unification took place.

Securitization creates value as it spreads. The buildup of money to pay for unissued securities reached impressive proportions in 1994 and 1995, when the investment services firm Templeton launched its Vietnam Opportunity Fund. This U.S. closed-end mutual fund, with shares restricted to an initial offering, will invest in Vietnamese companies. Though there were neither securities nor a stock exchange in Vietnam in 1994, U.S. investors showed their willingness to pay an anticipation premium by buying shares of the fund. The price of each share rose from 12 1/2 to 13 1/8 in one day when news surfaced that President Bill Clinton would give full diplomatic recognition to Vietnam. Investors bid up the price despite the fact that the fund had no investments in Vietnam. The manager of the fund—acting as a temporary proxy—has instead bought shares of companies that are doing business with Vietnam.

Wealth Creation or Economic Growth?

Governments can now set wealth creation as their goal. If exogenous shocks do not interfere, they can raise the dollar value of the entire capital stock of the country by as much as 30 per cent in one year. In the United States, the 1995 stock market rally increased the country's wealth by about $2 trillion, equivalent to 30 per cent of GDP. The growth of real GDP, a closely watched figure, was only about 2 per cent in 1995, or one-fifteenth as much. While market value increases do not necessarily raise real GDP, countries still can increase their wealth by attracting investment and providing guarantees that this investment will be protected.

The payoff is immediate enough for governments to take steps to control inflation and deficit spending. A country facing a fiscal deficit equal to 6 per cent of GDP previously had little incentive to cut the deficit to 2 per cent of GDP. Now it does, because the concurrent increase in the market value of its capital stock can be as much as 50 per cent of GDP. The upward re-pricing would occur with anticipation of a lower rate of inflation. Subsequently, the discount rate that investors would use in valuing the country's capital stock would decrease. When the applicable discount rate is 15 per cent, a perpetual bond that pays $1 per year is worth $6.67. When the applicable discount rate is much lower, for example 6 per cent, that same bond is worth $16.67 or $10 more.

The payoff for cutting inflation is large and immediate in a country where a significant portion of the capital stock is securitized. The higher the portion that is securitized, the greater the payoff.

The main theme of a value-creation policy is to protect the portfolio investor who invests a small amount to acquire a tiny block of shares in a company. That investor must earn a good return and be given full legal rights and protection vis-à-vis the large shareholders and company managers. Insider trading, rigged quotes, self-dealing, and other abuses must be crushed. Auditing standards must be beyond reproach, and trading practices on the national stock exchange must be absolutely aboveboard. Furthermore, transfer taxes, dividend withholding taxes, multiple exchange rates, capital gains taxes charged to foreigners, and sudden changes in securities law will all be counterproductive and deprive the government of income.

Most governments have not yet fully oriented their policies toward increasing wealth. Rather, they remain focused on increasing output. While Chile and Singapore have sought to create wealth directly, most countries still give priority to job growth and exports, and wealth increases, when they occur, are a serendipitous byproduct. As a consequence, there is room for more countries to adopt a wealth-creation policy. The field is not yet crowded with competitors.

The awesome power of this wealth-creation process, and its capriciousness, have raised the stakes for policymakers. Slight errors, which would not have hurt much 10 years ago, mushroom into horrible economic catastrophes with lasting effects. Conversely, policy moves that increase the value of financial assets are rewarded lavishly. In January 1996, for example, the Mexican government an-

nounced a series of price increases in products ranging from tortillas to telephone services. This announcement was taken by investors as a sign that their investments would be rewarded and triggered a rally in the stock market that raised the value of all stocks and bonds by 8.6 per cent in a week. This rally in Mexican financial assets increased their value by approximately $8 billion, even though the price increases had yet to generate any additional revenue. This wealth creation might seem ephemeral, but higher stock prices were indeed there, for anyone who wanted to sell.

The global value-creation machine has two faces. When news coverage indicates that the investment climate in a country is taking a turn for the worse, as with a botched devaluation or an attempted coup d'état, the punishment is quick and dire. The outflow of foreign exchange can be stunning and devastating. The collapse of local stock and bond prices is demoralizing, as liquidity dries up, sell orders swamp the telecommunications network, and bids disappear. The falling prices trigger margin calls. Escrow balances and collateral held on deposit are seized. Backup letters of credit are activated, clearing accounts are frozen, and cross-default clauses enter into effect.

In a small country dependent on foreign trade, such a crisis is immediately crippling. For a large country, a period of belt-tightening and reliance on home production is theoretically possible, but reverting to self-sufficiency is less and less tenable, because the degree of cross-border ownership has already risen too much, and too many people know that abundant foreign investment is easy to attract: It awaits only a favorable local investment climate.

When a country's stock market grows, the market's linkages with the rest of the economy become more pervasive and tight. The number of companies with listed shares grows, the volume of trading grows, and the shares of many companies become more and more actively traded. This means that these shares are priced daily and repriced every time there is new information. A company's poor performance also becomes public knowledge. A few bad quarters can now be punished by a savage wave of selling. A hasty merger or a well-choreographed restructuring may have to be arranged.

Signals from the capital market are transmitted throughout each national economy. The signals are an ever-changing assessment of the country and the individual companies headquartered there. The signals are fickle, yet they are altogether too real. The world finan-

cial market feeds on rumors, sound bites, and video clips. It is essential that investors have a positive image of a country.

The cost of bad news is immense in terms of lost value in stock and bond markets. Hundreds of billions of dollars can be lost in a matter of hours or days. In March 1996, when the People's Republic of China staged military exercises off the coast of Taiwan, the Hong Kong stock index fell 7.3 per cent in one day and was down 5.9 per cent for the week. Prices moved back up later, but the damage had already been done. Portfolio managers had to show losses on paper. When a fund's daily price quotation falls, this can lead to redemptions. If there are enough redemptions, that forces liquidation, and price declines further. In any case, paper losses hurt a fund's track record, and that can shatter a manager's career.

Any news item may be seized upon and blown out of proportion. To forestall the damage and build a positive image, countries need to keep up a constant drumbeat of probusiness news releases. An antibusiness government is an anachronism and would face a chronic lack of hard currency. Telecommunication systems make financial panics much more massive and sudden. For example, in 1992, there was an attempted coup d'état in Venezuela. Though it was put down in a few hours, and banks opened normally the following morning, half the country's accessible foreign exchange reserves had left before lunchtime.

More demanding is the need to meet or surpass forecasts. An economy that is projected to grow at 6 per cent during the next 12 months has to do at least that well. If it grows at only 5 per cent, some investors will be hurt. Some prices in the local stock exchange will have 6 per cent growth built in, and they will fall if only 5 per cent is achieved. Investors who expect growth to be higher than the forecast will cash in and move their money elsewhere.

Individual companies need to outperform their forecasts, see an improvement in their country's currency, and have contingencies ready to realign performance. For example, a Canadian company not only needs to earn more Canadian dollars per share, it also needs the Canadian dollar to rise. It can disappoint a shareholder in Europe either by failing to increase its profits in Canadian dollars or if the currency falls relative to the German mark or Swiss franc.

In comparison with other countries, the United States is less vulnerable to capital outflow. This relative immunity stems from the dol-

lar's worldwide role as a unit of account and the country's low dependence on imports. If foreigners panicked and sold their securities, the United States would suffer but rebound speedily. Exports would rise, and foreign investors would buy the undervalued assets.

A Rapid Transmission Mechanism

The Bretton Woods agreement of 1944 put into effect an exchange-rate mechanism that fostered world trade growth. It took away part of the monetary autonomy that countries had enjoyed in the 1920s and 1930s and, to compensate for the lost policy instruments, provided for rapid economic growth and improved international liquidity. The cross-border portfolio investment phenomenon has played a similar role. It has taken away many more policy instruments and has brought unprecedented wealth creation. For countries whose stock markets are embryonic, it offers two clear alternatives: keep the country's financial system closed and grow slowly through production or open the financial system and grow quickly by revaluing upward the market prices of income-producing properties.

The path to quick wealth has a cost: namely, it requires keeping hundreds of nervous portfolio managers and millions of fickle small investors convinced of the country's continued fast rate of growth. To do that, countries have to place every move under the scrutiny of financial analysts. Any move that the analysts do not approve of can be costly if it sets off a wave of selling.

The hair-trigger capriciousness of portfolio managers and small investors makes international portfolio investment a very effective transmission mechanism. It transmits economic pressures, and the judgment of the marketplace, much faster than the fixed exchange-rate system ever did. The market's displeasure is not felt first by export or import companies: It is felt everywhere at once, immediately and painfully. The quality of the message, and the wisdom of gearing public policy toward manipulating the message, are open to discussion; its speed of transmission and strength on impact are not.

These disadvantages notwithstanding, the path to the future is clear. More and more states have the opportunity to benefit from the global increase in wealth that securitization has brought. We have entered a new economic age.

ILLUSTRATION BY JOHN MACDONALD