Economic Issue of the Day

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What caused the global financial crisis of 2008?

On September 15, 2008, the global investment bank Lehman Brothers filed for bankruptcy protection, sending shock waves across the international financial system. This was soon followed by other bankruptcies, bailouts, and takeovers of financial institutions in the United States and Europe. The high point was reached when Iceland declared itself bankrupt following the meltdown of its financial system.

What caused the systemic failure of the global financial system and the subsequent credit crunch? The underlying reasons are a combination of overzealous ideology, financial innovation, faulty policy, perverse incentives, and in some cases outright deception. All these factors are interrelated. For example, faulty policy encouraged financial innovation that led to perverse incentives as may seen from the following description of events leading to the current crisis.

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Understanding how it happened

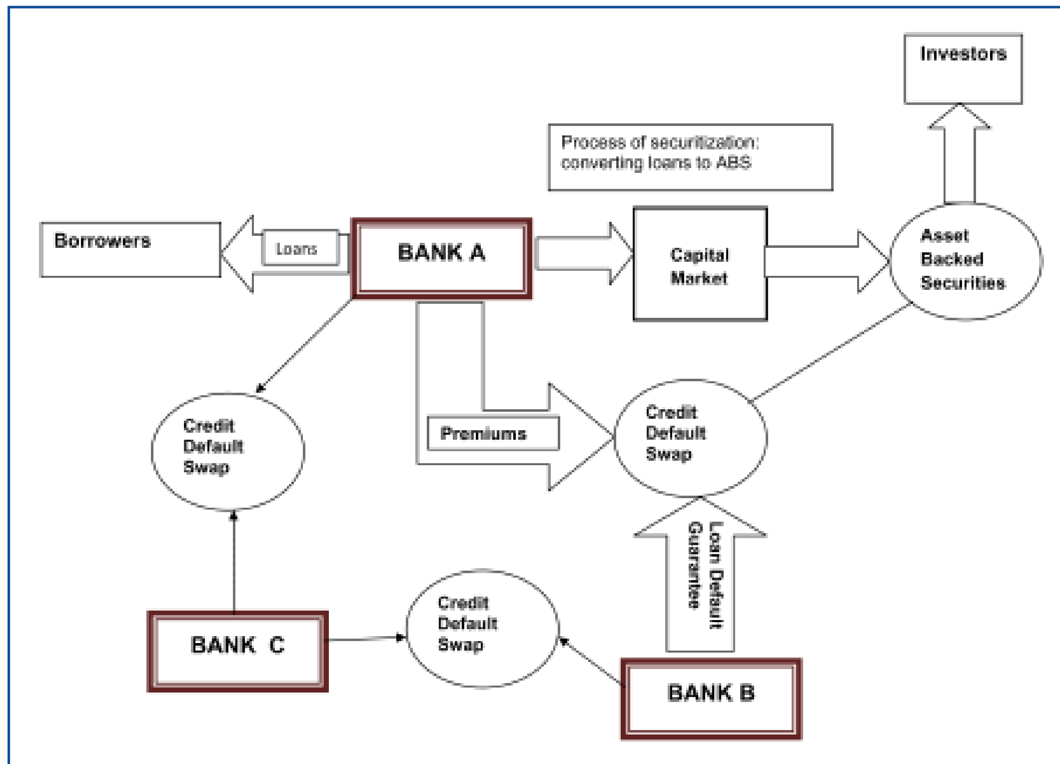
A typical bank makes loans to customers or borrowers. Before 1999, US commercial banks were restricted from doing investment activities. These restrictions were embodied in the Glass-Steagall Act of 1933 which essentially put a firewall between investment and commercial banking activities. This was primarily intended to prevent the use of bank deposits to finance speculative capital market activity such as betting on stocks, a practice that contributed to the crisis of the early 1930s.

Commercial banks, however, circumvented these restrictions by partnering with investment banks (e.g., Citibank and Citicorp) and by creating new instruments that were not covered by regulations. These restrictions were also eased over time until the Glass-Steagall Act was eventually superseded by the Gramm-Leach-Bliley Act in 1999 which deregulated the financial sector. This Act thereby allowed commercial and investment banks to consolidate, and opened up competition among banks, securities companies, and insurance companies.

The sharp reduction in regulation—largely driven by free-market ideology—can be seen in the financial innovation that created mechanisms for banks to convert large number of loans into asset-backed securities and sell them via capital markets to institutional and individual investors around the world (Figure 1). These asset-backed securities are part of the “derivatives” that were created during the past 35 years mainly to avoid regulation. Derivatives are financial contracts or instruments whose values are derived from the value of something else known as the *underlying*. The *underlying* on which a derivative is based can be an **asset**, e.g., commodities, equities or stocks, residential mortgages, commercial real estate, loans, bonds; or an **index**, e.g., interest rates, exchange rates, stock market indices, consumer price index; or **other items**, e.g., weather conditions; or even other derivatives.

Credit derivatives are based on loans, bonds, or other forms of credit. An important example is the credit default swap, which had a crucial role in the global financial crisis. A credit default swap (CDS)—which was conceptualized

Figure 1. Anatomy of a vulnerable financial system



in 1994 by JPMorgan—is a credit derivative contract between two parties. The *buyer* makes periodic payments (premium leg) to the *seller*, and in return, receives a payoff (protection or default leg) if an underlying financial instrument defaults. CDS contracts have been compared to insurance because the buyer pays a premium and in return receives a sum of money from the seller if a specified event occurs.

Under normal circumstances, a bank is supposed to hold in reserve an amount of money to protect itself against bad loans. However, the CDS substituted for this arrangement. In Figure 1, for example, Bank A purchases a CDS from Bank B. The former pays premiums to Bank B. In case a borrower of Bank A defaults, Bank B has to cover the loss by virtue of the CDS. Interestingly, many financial institutions were tied to one another through these deals. One can imagine Bank B buying a CDS from a Bank C and the latter buying a CDS from Bank A!

The CDS and asset-backed securities freed up bank capital that would have been held in reserve, thereby creating more loans that led to the rise in the absolute and relative size of financial markets. For example, US credit market debt rose from 168 percent of GDP in 1981 to over 350 percent of GDP in 2007. The notional value of all derivative contracts rose from about three times of global GDP in 1999 to over 11 times of GDP in 2007. The notional value of credit default swap derivatives, meanwhile, rose from about $6 trillion in December 2004 to $62 trillion three years later.[1]

Because of the surge in loanable funds, good or "prime" borrowers eventually became scarce. Thus, financial institutions turned to subprime borrowers. A subprime loan is a loan given to borrowers who are considered more risky, or less likely to be able to make their loan payments, in relation to high quality borrowers. Apart from the increase in their loanable funds, banks were encouraged to lend more between 2003 and mid-2007 because of the situation in the financial markets: interest rates, risk spreads, volatility, and corporate default rates were exceptionally low and corporate profits were high. Moreover, the subprime loans could be securitized and

[1] These figures are obtained from an article by James Crotty (2008): *Structural causes of the global financial crisis: a critical assessment of the 'New Financial Architecture'* downloaded from http://www.networkideas.org/featart/oct2008/Financial_Architecture.pdf.

Most of the subprime loans were channeled to the housing market because of the favorable conditions at that time. Rising real estate prices and low interest rates made it relatively easy for subprime borrowers to make payments on their loans. If they ran into financial trouble, they could tap the equity in their home—the higher price of their homes increased the value of the collateral—to refinance at more favorable terms or to make their mortgage payment.

combined with less-risky assets in order to conceal the former's riskiness. Other investors therefore unwittingly assumed the high risk involved. Some analysts even contend that banks purchased each other's asset-backed securities to create an atmosphere of a bull market, thereby encouraging other investors to jump in.

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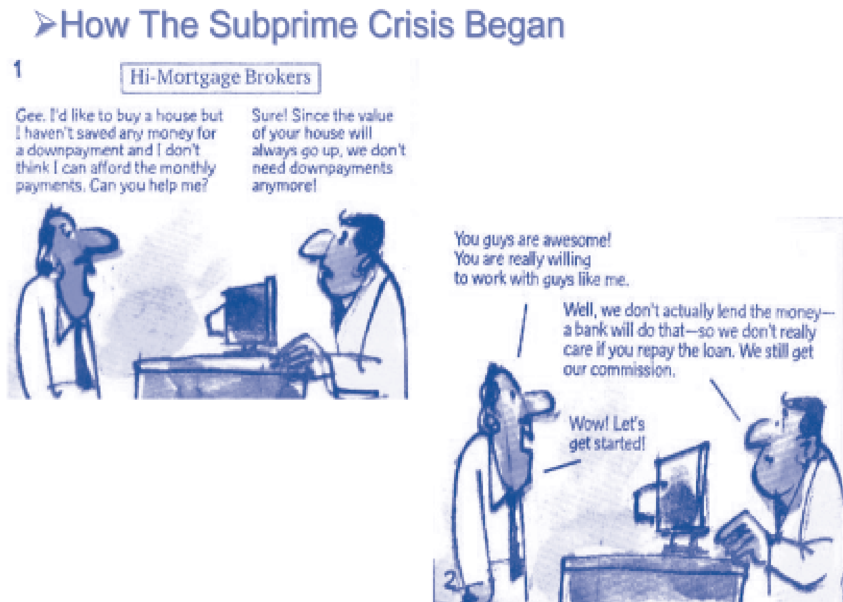

Unfortunately, real estate prices came tumbling down, triggered by an oversupply in the housing market and rising interest rates. This caused many borrowers to default on their loans. In 2007, nearly 1.3 million US housing properties were subject to foreclosure activity. Several banks started to dispose of real estate in their balance sheets to cover bad loans causing housing prices to drop further. The slump in the housing market triggered a US recession in 2007 which likely caused loan defaults in other sectors.

Some banks like Lehman Brothers were more heavily exposed to subprime loans and securities backed by subprime loans and had no choice but to declare bankruptcy.[3] However, since many US banks were tied together because of the credit default swaps, the entire financial system was dragged down by the subprime mortgage crisis and US recession. Many banks and individuals abroad had also invested in securitized assets backed by subprime mortgages. Their investments thus turned sour because the assets on which they were based became worthless.

Addressing the crisis

The critical question is how to address the current global financial crisis. Details are not covered in this present write-up but the general approach in the short-term is a bailout by the government. The primary beneficiaries of the proposed bailouts are the financial institutions in order to assure the continued flow of credit. One approach is for government to extend loans to the distressed financial institution in exchange for a degree of corporate control. For example, the insurance firm American International Group (AIG) was given assistance by the US government because it was a linchpin in the CDS market. It is estimated

[2] The value of USA subprime mortgages was estimated at $1.3 trillion in March 2007. Between 1997 and 2006, the price of the typical American house increased by 124 percent. Since then, however, prices have fallen and as of November 2008, they have fallen by 22 percent on average.

[3] As of August 2008, financial firms around the globe have written down their holdings of subprime-related securities by US$501 billion. Data for footnotes [2] and [3] were obtained from http://en.wikipedia.org/wiki/Subprime_mortgage_crisis.

that at the time of its bailout, AIG held $440 billion of credit default swaps. Other analysts have proposed that borrowers be direct beneficiaries of the bailout.

It should, however, be recognized that the present financial crisis is related to many past crises. The root cause is the unipolar global financial system, the main features of which are that most of the international trade is denominated in US dollars, most of the international reserves are held in US dollars, and the US can pay for its external deficits by printing dollars which it does not expect to be redeemed in the foreseeable future. The misuse of this privilege by the US has led to an excess of global liquidity that has resulted in overlending, overborrowing, and asset price volatility. Developing countries, including the Philippines, could be considered one of the first subprime borrowers. During the international debt crisis of the 1980s, creditors got away virtually unscathed with the debt being socialized and absorbed by the citizens of the borrowing countries.

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The long-term solution therefore calls for a fundamental reform of the International Financial Architecture, a topic that has been discussed extensively in other fora. ✽

Definition of terms

Credit crunch – refers to a reduction in the available supply of credit and is a supply-side phenomenon.

Derivatives – are financial contracts or instruments whose values are derived from the value of something else known as *underlying*.

Underlying – can be an asset such as commodities, equities or stocks, residential mortgages, loans, etc.; or an index such as price index, etc.; or other items such as weather conditions on which a derivative is based.

Credit default swap – is a credit derivative contract between two parties, the buyer and the seller, where the buyer pays some kind of premium to the seller and in return receives a sum of money from the seller if a specified event occurs.

Default – failure to finish or fulfill an obligation.

Securitize – to assure payment of something by giving a pledge or collateral.

Subprime loans – loans given to borrowers who are considered more risky, or less likely to be able to make their loan payments vis-à-vis high quality borrowers.

The *Economic Issue of the Day* is one of a series of PIDS efforts to help in enlightening the public and other interested parties on the concepts behind certain economic issues. This dissemination outlet aims to define and explain, in simple and easy-to-understand terms, basic concepts as they relate to current and everyday economics-related matters.

This *Issue* was written by Josef T. Yap, President of the Institute.

The views expressed are those of the author and do not necessarily reflect those of PIDS and other sponsors. ✽

Philippine Institute for Development Studies
NEDA sa Makati Building, 106 Amorsolo Street, Legaspi Village, Makati City ● Telephone Nos: (63-2) 8942584 and (63-2) 8935705 ● Fax Nos: (63-2) 8939589 and (63-2) 8161091
URL: http://www.pids.gov.ph