A CIGS (The Canon Institute for Global Studies) Special Seminar

Jay Rosengard, Professor of Harvard University.

Date: Wednesday, January 13, 2010

Location: Shin-Marunouchi Building 9F (Conference Room #902)

Time: 12:00-13:30

On January 13, 2010, the Canon Institute for Global Studies (CIGS) had the privilege of welcoming Professor Jay Rosengard, who lead a discussion entitled “The Global Economic Crisis: Mitigating the Impact and Preventing a Recurrence.”

He addressed the audience over the issues of (1) underlying causes of the crisis, (2) short-term triggers for the crisis, (3) accelerants for the crisis, (4) current and potential magnitude of the crisis, (5) responses to the crisis, and (6) a post-Bretton Woods world order as a new global financial architecture.

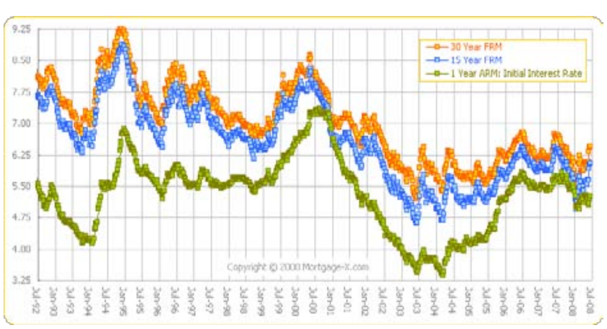
Structure of Presentation

- Accumulation of fuel for the fire: Underlying causes of the crisis
- Lighting the fire: Short-term triggers for the crisis
- Pouring fuel on the fire: Accelerants for the crisis
- Scorched earth and unburned terrain: Current and potential magnitude of the crisis
- Responses to the crisis: Liquidity, solvency, and trust
- A new global financial architecture: A post-Bretton Woods world order

(1) Accumulation of Fuel for the Fire: Underlying Causes of the Crisis

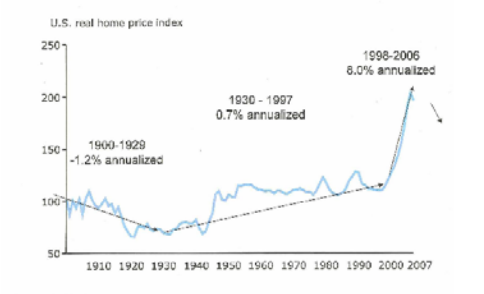
At the beginning, he explained the U.S. real estate bubble by pointing out (a) dramatic decline in mortgage interest rates, (b) steep rise in home values, (c) false financial alchemy, (d) perverse incentives, (e) regulatory failures, and (f) strong supply response.

Mortgage Interest Rates



Source: http://mortgage-x.com/trends/htm, visited 8/12/08.

Home Prices Grew Substantially Above Mean



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False Financial Alchemy

- A large number of loans were made that should not have been made because of the:
  - Lowering of underwriting standards (see below)
  - The belief that escalating home prices and securitization mitigated credit risk through the refinancing and repackaging of debt
- Underwriting standards were lowered by the growth of:
  - Alt-A (alternative documentation) loans
  - Ninja (no income, no job, no assets) loans
  - ARMs (adjustable rate mortgages) with refinancing, often teaser loans with resets
  - Subprime mortgages, often combined with above

Perverse Incentives

- The focus on fee generation over fiduciary responsibility created significant moral hazard in lending and underwriting practices
- Both bank and non-bank originators securitized and sold mortgages, after which they were no longer responsible for loan performance – severed relationship between borrower and investor
- Short-term or one-time bonuses provided powerful incentives to neglect long-term risks and vulnerabilities

Incentives for Subprime Mortgages

<u>Borrower</u>

- Participate in the housing boom – don't get left behind
- Get in before priced out - cheap initially, refinance later

<u>Originator</u>

- Make a fee, then sell the loan – no longer responsible
- Insatiable demand from Wall Street – excess liquidity

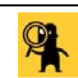
<u>Investor</u>

- Higher return than alternatives without more risk
- Good rating and escalating home prices are insurance

<u>Government</u>

- Promote home ownership
- Support housing and financial sectors

Regulatory Failures



- Financial innovation outpaced the capacity of private managers and public officials to monitor and control the situation
- Creative financial engineering produced complicated loan products, which were packaged into even more complex instruments and sold repeatedly in secondary mortgage markets
- Many mortgages were originated by unregulated non-bank financial institutions, which enabled evasion of truth in lending laws
- Aggressive deregulation and faith in markets

Strong Supply Response

- One of the most direct effects was on construction of new homes
- In 2005, 1,283,000 new single-family homes were sold, compared with an average of 609,000 per year during 1990–95
- The largest home builders, such as D.R. Horton and Pulte, saw their highest share prices and revenues in 2004–2005
  - D. R. Horton's stock went from $3 in early 1997 to all-time high of $42.82 on July 20, 2005.
  - Pulte Corp's revenues grew from $2.33 billion in 1996 to $14.69 billion in 2005

(2) Lighting the Fire: Short-term Triggers for the Crisis

He then referred to (a) tightening of monetary policy by the Fed, and (b) deterioration of U.S. housing market.

Short-Term Triggers

- Tightening of monetary policy by the Fed
  - Federal funds effective rate rose from 1.0% in June 2004 to 5.3% in August 2006
  - More than five-fold rise in approximately 2 years
- Deterioration of U.S. housing market
  - July 2006: Peak of new risky home loans
  - January 2007: Home prices begin steep fall
  - April 2007: New Century enters bankruptcy
  - July-Dec. 2007: Sharp rise in mortgage defaults
  - June 2008: Onset of Fannie/Freddie share decline
  - July 2008 - IndyMac failure

(3) Pouring Fuel on the Fire: Accelerants for the Crisis

Third, he talked about the accelerants for the crisis by touching on the issues of (a) macroeconomic context and (b) ripple effects and negative synergies.

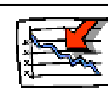
Macroeconomic Context

In addition to the financial crisis:

- Budget deficit (2008 estimate: 2.9% of GDP)
- Current account deficit (2007: 5.1% of GDP)
- Declining real GDP growth (2007: 1.3%)
- Record share of personal consumption (2007 Q3: 70%)
- Record borrowing against homes to finance spending (2007 estimate: $950 b)
- Increasing CPI (2007: 2.9%)
- Waging two wars with significant tax cuts
- Commodity price shocks increase risk of “stagflation”
- General economic slowdown, fear of “W” recession (double-dip)

→ United States in a recession since December 2007

Ripple Effects and Negative Synergies



- “Perfect storm” of asset price deflation (burst of property and stock market bubbles), illiquidity (modern bank runs), and insolvency (mark-to-market accounting) → deleveraging
  - Housing deterioration in 2006 created “credit” issue
  - “Credit issue” quickly transformed into a “liquidity” issue
  - “Liquidity” issue ultimately became a “capital” issue
- “Vortex of five vicious cycles” (Larry Summers)
  - Stock prices fall → investors sell stock → stock prices drop even more
  - Bank portfolios lose value → less capital to lend → lose even more value
  - Economic slowdown → weaker financial system → less lending → further economic contraction
  - Less spending → job losses → lower incomes and even less spending (“Keynesian cycle”)
  - Depositors rush to withdraw funds from troubled banks (“bank runs”) → banks in further distress → more withdrawals (“panic cycle”)

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(4) Scorched Earth and Unburned Terrain: Current and Potential Magnitude of the Crisis

Fourth, he examined the magnitude of the crisis.

Extent of U.S. Housing Crisis

- Despite writing off billions of dollars of assets, creditors do not yet know the ultimate extent of losses on complex securities
- Homeowners facing foreclosure/renters facing eviction
- Subprime ARM resets averaged about $90 b/quarter in 2008
- 937,840 foreclosures in Q3 2009, up 23% over Q3 2008
- Problem not confined to subprime mortgages – conforming mortgages also "upside down," creating "foreclosure spirals"
- General decline in property values of 15-20% from peak, another 5-10% decline estimated during 2009
- 85% increase in real home prices from 1997 to 2006
- Many homeowners with conforming mortgages "upside down"
- Cumulative negative wealth effect on consumption of 20% drop approximately $400 b (20% x $20 tr housing wealth x .10)
- These estimates exclude direct transaction costs of foreclosure, normally about one-third or more of a home's value

U.S. Forecast

- Formally in a recession since early 2008, probably will not bottom out until 3rd or 4th quarter 2009
  - 2009 estimate: GDP -2.6%
  - Worst recession since WWII: GDP -4.0% (peak-to-trough)
  - Unemployment rate: ≈ 10%
- Median home prices will decline at least another 5-10%, and will probably overshoot the ratio of 3x median household income
- Household consumption will decline at least an additional 2-3% of GDP, and will probably overshoot the 67% of GDP equilibrium

U.S. Forecast (continued)

- "Green shoots" of recovery
  - Housing construction, retail sales, factory orders, exports, industrial production, financial markets all stabilized
  - Excess inventories reduced
  - Pace of job losses slowed
- Remaining concerns
  - Deteriorating commercial real estate market
  - No pent-up demand for cars and houses yet, which typically drives a V-shaped recovery; when this demand emerges, might be frustrated by risk averse lenders ("credit crunch")
  - Rapid, significant increase in national debt

→ U-shaped recovery (2.2% GDP growth in 2010, high unemployment, Fed policies unlikely to change soon)

Global Forecast

- Global economy will contract ≈ 0.8% in 2009 (first time world output has fallen since the IMF began collecting data in 1970) - result of collapse of both U.S. domestic demand (esp. consumer spending) and world trade
- While domestic stimulus packages might cushion downturns in some countries (most notably China), a global recovery must be fueled by U.S. recovery
- Recovery sequence: U.S. policy stimulus → ↑ U.S. domestic demand → ↑ U.S. production → ↑ U.S. imports + ↑ non-U.S. exports → synchronized global expansion = global recovery
- At present, about half-way through this sequence
- Synchronized global expansion estimated to begin the second half of 2010

Global Forecast (continued)

- Conditions in other major economies similar, as the global recession reflected:
  - Synchronized contraction of world's high-income economies
  - Synchronized slowing of dynamic developing economies
  - Collapse of world trade had a larger effect on export oriented economies (Japan, Germany, Hong Kong, Singapore) than the collapse of consumer spending had on U.S. economy
- Japan: -6.0% in 2009, + 1.5% in 2010 (est.); deflation
- Eurozone: -4.0% in 2009, +0.9% in 2010 (est.)
- Key challenges for developing countries
  - *External:* weak export markets, rising commodity prices, volatility in global financial markets (particularly deleveraging)
  - *Internal:* weak domestic demand, declines in relative productivity, infrastructure bottlenecks, bursting of credit-fueled bubbles in housing and stock markets

Global Financial Market

- Global financial markets are healing as signs of recovery emerge and the appetite for risk is revived
- Equities have rebounded, with emerging market equities outperforming other equity markets
- Oil prices have recovered and stabilized
- Flight to the U.S. dollar has subsided
- Credit spreads have narrowed
- Sovereign yields are off their lows but have not continued to rise
- Prospects for further disinflation and prolonged low interest rates are mitigating the recovery trade

(5) Responses to the Crisis: Liquidity, Solvency, Stimulus, and Trust

Fifth, he explained responses to such problems as liquidity, solvency, and stimulus packages.

The Government As Lender of Last Resort: Low-Interest Loans Made to Financial Institutions

- Total Committed: $4.3 trillion
- Key Components:
  - Term Auction Facility ($900 b)
  - Other Loans ($550 b)
  - Term Asset-Backed Securities Facility ($200 b)
  - AIG ($85 b)
  - Commercial Paper Funding Facility ($1.8 tr)
  - International Currency Swap Lines ($755)
- Many central banks have coordinated liquidity injections with the U.S. Federal Reserve

The Government As Insurer of Last Resort: Guarantees to Investors and Depositors

- Total Committed: $3.6 trillion
- Key Components:
  - Bank Debt ($1.5 tr)
  - Money Market Funds ($600 b)
  - Non-Interest Bearing Deposits ($500 b)
  - Citigroup (260 b)
  - Bear Stearns ($29 b)
  - Morgan Stanley ($29 b)
- Increased deposit insurance in U.S. and abroad
- G10 also issued large (usually partial) guarantees

The Government As Insurer of Last Resort: Guarantees to Homeowners

- Hope for Homeowners Program
- Key Features:
  - New legislation, effective 1 October 2008
  - Refinance into 30-year, fixed rate FHA-insured mortgages with maximum 90% loan/value ratio
  - FHA will insure up to $300 b in new loans
  - Borrowers pay upfront premium of 3% of original mortgage amount + 1.5% annual premium of outstanding mortgage
  - Additional costs incurred by FHA will be reimbursed by Fannie Mae and Freddie Mac
  - Supplements FHASecure refinancing program
- Short sales vs. negative amortization certificates (Office of Thrift Supervision)

The Government As Investor of Last Resort: Stakes in Financial Institutions & Other Purchases

- Total Committed: $3.1 trillion
- Key Components:
  - Commercial Paper($1.6 tr)
  - Federal Home Loan Bank Securities ($600 b)
  - Fannie Mae/Freddie Mac ($200 b)
  - Emergency Economic Stabilization Act/Troubled Asset Relief Program ($700 b)
    - Capital Purchase Program ($250 b)
    - Systemically Significant Failing Institutions ($40 b)
    - Automotive Industry Financing Program ($19.4 b)
    - Targeted Investment Program ($20 b)
    - Largest institutions repaying TARP funds quickly

Recent Trend in Bank Failures

- Growing divide between large and small banks
  - Largest banks growing stronger as economy improves
  - Small banks burdened by commercial real estate loans
  - $870 b of total $1.8 tr in commercial real estate loans on balance sheets of small and medium-size banks
- Pace of bank failures accelerating
  - 133 failed banks in 2009 (as of 11 December)
  - Highest number of failures since 181 banks failed in 1992 (but less than record high of 534 closures in 1989)
  - FDIC's deposit insurance fund now in the red
  - By comparison, 25 bank failures in 2008, and just 10 bank failures in the previous five years
  - Too big too fail versus too small to save

The Government As Builder: U.S. Stimulus Packages

- U.S. Economic Stimulus Act of 2008
  - Total spent/Total committed: $168 b/$168 b
  - Paid in the form of income tax rebates
  - Much of the assistance saved, not spent
- U.S. Proposed New Stimulus: $700 - $1,000 b
  - Must maximize speed and magnitude of stimulus
  - Must assist those most vulnerable
  - Must invest in future capacity to compete
  - "American Recovery and Reinvestment Plan" a combination of extension of unemployment and health insurance benefits, aid to state and local governments, labor-intensive public works projects in clean energy, education, health care, and new infrastructure, and tax breaks for households/ businesses

The Government As Builder: Global Stimulus Packages

- United States: $943 b ($168 b + $775 b) [6.5%]
- China: $586 b (4 trillion yuan) [13.5%]
- Japan: $270 b ($116 b + $154 b) (¥27 trillion) [5.5%]
- Germany: $69 b [1.9%]
- France: $33 b [1.2%]
- United Kingdom: $30 b [1.1%]
- Spain: $14 b [0.9%]
- South Korea: $11 b [1.2%]

The Government As Builder: Stimulus Package Policy Dilemmas

- Size
  - Too big → inflation, crowding out of private sector
  - Too small → negligible impact
- Timing
  - Too fast → overwhelm absorptive capacity
  - Too slow → counterproductive time lag
- Structure
  - Wrong form → saving > consumption & investment
  - Mistargeting → economic inefficiency, corruption

(6) A New Global Financial Architecture: A Post-Bretton Woods World Order

Finally, he presented his prospects for a new financial architecture.

Current Global Financial Architecture (1)

Bretton Woods Institutions

- World Bank Group (World Bank)
  - International Bank for Reconstruction & Development (IBRD)
  - International Development Agency (IDA)
  - International Finance Corporation (IFC)
  - Multilateral Investment Guarantee Agency (MIGA)
- International Monetary Fund (IMF)

International Trade

- General Agreement on Tariffs and Trade (GATT)
- World Trade Organization (WTO)

Current Global Financial Architecture (2)

World Bank

- **IBRD:** Established in 1944 to finance the rebuilding of economies destroyed by WWII; its current main objective is to finance growth in developing countries via concessional loans
- **IDA:** Established in 1959 to finance development in countries unable to service IBRD loans (the world's poorest countries)
- **IFC:** Established in 1956 to promote private sector growth in developing countries via equity or quasi-equity investments
- **MIGA:** Established in 1988 to promote investment in developing countries via guarantees against non-commercial risk
- **IMF:** Established in 1944 primarily to act as a lender of last resort to member states in financial distress

Current Global Financial Architecture (3)

International Trade

- GATT
  - Established in 1947 after failed negotiations to create the International Trade Organization (ITO)
  - Lasted until 1994, when it was replaced by WTO
  - Primary purpose to reduce barriers to international trade via the reduction of tariff barriers and quantitative restrictions, as well as trade-related subsidies
- WTO
  - Created by GATT 1994 (GATT update)
  - An institutional body, not a set of mutually agreed rules (treaty), with dispute resolution authority

Current Global Financial Architecture (4)

Criticisms

- World Bank
  - Crowding out private sector resources and opportunities
  - Inappropriate and ineffective interventions
  - Inequitable governance and management
- IMF
  - Insufficient resources
  - Inappropriate and ineffective interventions
  - Inequitable governance and management
- WTO
  - Double standards for new members
  - Weak enforcement
  - Challenges of domestic constituencies and politics

Global Responses to Date

- Government as lender: low interest loans made to financial institutions to inject liquidity
- Government as insurer: guarantees granted to investors and depositors to restore confidence
- Government as investor: stakes taken in financial institutions to restore solvency
- Government as builder: launch of stimulus packages as countercyclical expenditures

Pre-Crisis Initiatives For Reform (1)

Crisis Prevention

- Enhance transparency and accountability, promote sound policies, strengthen institutional foundation
- Development and implementation of international standards and good practices
  - Exchange rate management
  - Public debt management
  - Capital account liberalization
- Deepening and broadening surveillance
  - Financial Sector Assessment Programs (FSAP)
  - Reports on Observance of Standards and Codes (ROSC)
- Intensification of capacity building

Pre-Crisis Initiatives For Reform (2)

Crisis Mitigation and Solution

- Minimize likelihood and impact of financial spillovers and contagion via large rescue packages to alter market sentiments and restore financial stability
  - Conventional: General Agreements to Borrow (BAG)
  - 1998: New Arrangements to Borrow (NAB) → 2x IMF funds
  - 1999: Contingent Credit lines (CCL) → never used
- Sovereign Debt Restructuring Mechanism (SDRM)
  - Bankruptcy procedure for an insolvent government to seek legal protection from external creditors during debt restructuring → never approved
- Collective Action Clauses (CACs)
  - Modification of bond terms by substantial majority to impose debt restructuring agreements on minority creditors → increasingly popular but limited application

Further Options For Reform (1)

- Three main alternatives under discussion
  - Increase IMF resources; leave role unchanged
  - Increase IMF resources; broaden role
  - Leave IMF as it is; invent new structures, institutions, financing mechanisms, early warning systems, etc.
- Fundamental IMF issue remains governance
  - Under-representation of emerging markets due to “legacy” voice (votes and chairs)
  - Constraint on increasing resources and authority

Further Options For Reform (2)

- France: Super-regulator
  - Profound non-convergence in national systems
  - Control and governance of super-regulator
- UK: Early warning system
  - Powerful countries find ways to suppress warnings
  - Powerful countries ignore warnings that are issued
- Other alternatives
  - Regional coordination with growing role of regional leaders, especially BRIC countries
  - Special role for large sovereign wealth funds & petrodollars
  - “Tobin tax” on financial transactions
- Possible national trends
  - Consolidated regulators in the U.S. and E.U.
  - Regulation of leverage when large relative to system
  - Capital requirements against complexity and risk

Further Options For Reform (3)

Key Components of U.S. Regulatory Reform

- Expand powers of Federal Reserve to regulate risk & set cash requirements at all major financial institutions
- Give government the power to take control of large financial firms, not just banks, posing a systemic risk
- Create a Consumer Financial Protection Agency to ensure consumers are treated fairly
- Establish standards for executive compensation
- Force hedge funds to register with the SEC & disclose enough information to assess their financial stability
- Tighten rules & increase transparency for derivatives