

STRICTLY CONFIDENTIAL

# **AIG: Is the Risk Systemic?**



## What is Systemic Risk?

- *Systemic risk* is the risk imposed by *inter-linkages* and *interdependencies* in a system or market, which could potentially bankrupt or bring down the entire system or market if one player is eliminated, or a cluster of failures occurs at once.<sup>1</sup>
- Systemic financial risk occurs when contingency plans that are developed individually to address selected risks are collectively incompatible. It is the quintessential “knee bone is connected to the thigh bone...” where every element that once appeared independent is connected with every other element.
- AIG’s business model – a sprawl of \$1 trillion of insurance and financial services businesses, whose AAA credit was used to backstop a \$2 trillion dollar financial products trading business – has many inherent risks that are correlated with one another. As the global economy has experienced multi-sector failures, AIG’s vast business has been weakened by these multi-sector failures.
- AIG’s original problem – an over-reliance on U.S. residential mortgage-backed securities (RMBS) in its investment portfolios – has now been deepened by weakness in the commercial mortgage-backed securities market, the global real estate market, the global equities market, slowing business and consumer spending activity and the concomitant demand for higher liquidity by regulators and customers around the world.
- Systemic risk afflicts all life insurance and investment firms around the world. Thus, what happens to AIG has the potential to trigger a cascading set of further failures which cannot be stopped except by extraordinary means.



## Risk Assessment Summary

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- In the fall of 2008, the Federal Reserve and Department of the Treasury determined that the systemic risk of a failure of AIG was so great that they should provide a support program by injecting liquidity and equity capital into AIG.
- To repay the debt and reduce the degree of financial risk to the firm, AIG has instituted a wind-down of its Financial Products business and a massive divestiture process to sell businesses, despite the increasingly difficult M&A and credit environment.
- The previously provided solution addressed short-term liquidity needs and AIG's over-concentration in the RMBS market. But AIG still faces massive investment losses and credit downgrades. Without additional federal tools being deployed in the AIG situation, AIG will not be able to repay its obligations. Despite adequate current security against the U.S. government's investment, that investment may not be recovered.
- AIG operates in more than 140 countries around the world, whose customers, regulators, and governments have thus far been refrained from liquidating or seizing assets based largely on the support given to AIG by the U.S. government.
- The failure of AIG would cause turmoil in the U.S. economy and global markets, and have multiple and potentially catastrophic unforeseen consequences.
- The inability of AIG to immediately secure additional assistance from the Federal Reserve and the Department of the Treasury threatens not only AIG's sales process, but also consumer and business confidence around the world.

- While the term “insurance” is used, AIG and its industry brethren sell and service not just the traditional property and casualty and death benefit life insurance policies, but accident and health coverage, pension and retirement policies, and a variety of wealth accumulation vehicles, such as annuities.
- The systemic risk is principally centered in the “life insurance” business because it is this subsector that has the greatest variety of investments and obligations that are subject to loss of value of the underlying investments.
- The life insurance industry employs approximately 2.3 million people in the U.S. who sell individual and group policies. There are over \$19 trillion of face value “life” policies in force in the U.S. and 375 million policies.
- Over the past decade, the voluntary termination rate on individual policies declined remarkably (to six percent by 2007) as consumers could obtain liquidity from numerous other sources.
- A significant rise in surrender rates – inspired by consumers’ needs for cash or because of rumored or real failure of insurance companies – could be disastrous. Because of widespread loss of liquidity, the industry would struggle to raise adequate cash to meet surrender requests. A “run on the bank” in the life and retirement business would have sweeping impacts across the economy in the U.S. In countries around the world with higher savings rates than the U.S., the failure of insurance companies like AIG would be a catastrophe.



## Impact on U.S. Government's Efforts to Stabilize Economy

- If AIG were to fail notwithstanding the previous substantial government support, it is likely to have a cascading impact on a number of U.S. life insurers already weakened by credit losses. State insurance guarantee funds would be quickly dissipated, leading to even greater runs on the insurance industry.
- Given AIG's insurance companies' relative size compared to other U.S. insurance companies, there is no ability for an "arranged marriage" of AIG's largest units with other U.S. insurance companies.
- In addition, the government's unwillingness to support AIG could lead to a crisis of confidence here and abroad over other large financial institutions, particularly those that have thus far remained viable because of government support programs.
- This loss of confidence is likely to be particularly acute in countries that have large investments in U.S. companies and securities and whose citizens may suffer significant losses as a result of the failure of AIG's foreign insurance subsidiaries.
- This could lead directly to a decrease in the attractiveness of U.S. government securities and a consequent increase in borrowing costs for the U.S. government and related issuing entities.



## Impact on U.S. Government's Efforts to Stabilize Economy

- Moreover, permitting AIG to fail would be even more serious today than in September, especially in view of the support of the U.S. government. Public confidence in financial institutions is at a nadir and it is questionable whether the economy could tolerate another shock to the system that a failure of AIG would produce.
- The extent and interconnectedness of AIG's business is far-reaching and encompasses customers across the globe ranging from governmental agencies, corporations and consumer to counterparties. A failure of AIG could create a chain reaction of enormous proportion.
- While some of these potential consequences are inherently judgmental and, to an extent, speculative, if there is one conclusion that can be unquestionably drawn from the failure of Lehman, it is that the adverse consequences of the failure of a major financial institution cannot be foreseen.
- Just as the government was unable to predict that the failure of Lehman would lead to the collapse of the Reserve Fund, followed by much of the money market industry, the government would be even less capable of predicting the fallout from the collapse of a much larger, more global and more consumer-oriented institution such as AIG.



## AIG's Global Impact

### Domestic General

- Largest U.S. underwriter of commercial and industrial insurance
- #1 U.S. underwriter of D&O, EPL, Professional Liability, Workers' Comp, Surplus Lines, Environmental, Aviation and many other lines

### Foreign General

- Most extensive international property-casualty network
- Largest foreign owned property-casualty insurance franchise in Japan, mainland China, Hong Kong, Korea and Thailand
- Largest U.S. based general insurer in Europe

### Financial Services

- Highest fleet value of any aircraft lessor
- 2nd largest consumer finance branch network in U.S.

### Domestic Life & Retirement Services

- #1 retirement services provider to primary and secondary education, #2 healthcare groups, #3 higher education
- #1 in term life and ordinary life
- Largest issuer of fixed annuities

### Foreign Life & Retirement Services

- Most geographically diversified life insurance organization
- Largest life insurer in Southeast Asia and the Middle East, Hong Kong, the Philippines, Singapore and Thailand
- # 1 foreign life insurer in Japan, with significant cash in Japan for all insurers

### Asset Management

- Largest investor (including all of AIG's investments) in corporate bonds in the U.S.
- Top five largest institutional asset managers in the world
- Largest independent broker-dealer organization in the U.S.



## General Impact on Economy

**A failure of AIG would have a devastating impact on the U.S. and global economy.**

**The economic effects may include:**

- Potential unemployment for a large portion of the 116,000 employees, including 50,000 employees in all 50 states and the District of Columbia (generating annual U.S. salaries totaling \$3.5 billion)
- Adverse impact on AIG's 74 million customers worldwide, including 30 million U.S. customers in its general insurance, life insurance and retirement services, and financial services businesses
- **The immediate damage to credit markets worldwide from an AIG failure would dwarf the Lehman fallout. Possible outcomes for which the Treasury would need to be prepared to respond:**
  - Fall in the foreign exchange value of the dollar
  - Increase in Treasury borrowing costs
  - Doubts about the ability of the U.S. to support its banking system





## Life Insurance Policyholders: “Run on The Bank”

- **AIG has written more than 81 million life insurance policies to individuals worldwide**
  - Face value: \$1.9 trillion
  - Claims paid in 2008: more than \$12 billion
  
- **If AIG fails, policyholders are likely to seek to “cash in” policies, placing enormous strain on the insurance system, as well as bond and equity markets as assets are liquidated to pay policyholders**
  - Surrender of insurance policies at above-normal actuarial rates could impair current policyholders as capital, along with state guarantee funds, might be insufficient to pay all policyholder claims
  - Third-party sellers of AIG products would face an unmanageable spike in customer redemption demands, damaging consumer confidence
  - Forced sales of assets would be required to cover withdrawals
  
- **Existing AIG policyholders could be unable to obtain insurance coverage from other insurance companies**
  - Potential dramatic increases in policy costs and/or significant decline in available products (e.g. fixed annuities)
  - Some life policyholders may no longer be insurable at commensurate rates or as a result of adverse health situations since purchase of original policy



## Impact on Retirement Savings

### ▪ AIG Retirement Services

- 6.7 million policies/accounts – including many retired Americans
  - Total account value: \$147.5 billion
  - Many beneficiaries are middle-class Americans earning around \$50,000-60,000 a year
  - Income from AIG's 403(b) plans is often the beneficiary's only source of retirement income
- Products include defined contribution retirement accounts, such as 401(k) (VALIC), deferred fixed annuities (AIG Annuity), variable annuities and brokerage accounts
- AIG Annuity: #1 ranked seller of fixed annuities through financial institutions
- VALIC: #1 or #3 ranked across non-profit sectors (#1 in K-12 teachers, #1 in higher education and #3 in healthcare)

### ▪ Consequences of Failure

- A VALIC/AIG Annuity failure would be one of the largest failures in the history of life insurance, putting applicable retirement savings significantly at risk and causing a loss of confidence in the private pension system in the U.S.
- Failure would produce an immediate “run on the bank,” which would likely lead to state seizures of local operations, causing a lock-up in customers' retirement accounts and payment of monthly/quarterly annuity checks
- Seizure by state regulators would have an adverse impact on state guarantee funds, which are unfunded, resulting in assessments against other insurance companies
- Such assessments in an already weak market could lead affected industry players to sell assets, resulting in downward pressure on fixed income markets
- Under current market conditions and because of the capital intensive nature of the fixed annuity business, capacity may not be picked up by peers
- Given the foregoing, there is a risk of undermining the confidence in the private pension system in the United States



## Consumer Finance Impact

- An AIG failure could lead to the failure of American General Finance (AGF), America's second largest "Main Street" lender
  - AGF:
    - Prudently has helped American consumers and small businesses for more than 85 years
    - Is serving more than 2 million American families with more than \$24 billion of loans through 1,400+ offices in 40 states
    - Supports more than 20,000 retail merchants
    - Employs approximately 8,000 people
    - Serves communities in small / medium sized cities that are underserved by U.S. megabanks
  - A failure of AGF could:
    - Eliminate \$12 billion to \$15 billion in U.S. consumer lending over the next 3 years that is not provided by banks
    - Trigger a default (and related litigation) on more than \$23 billion of AGF debt held by U.S. and European investors
  
- Also, AIG Consumer Finance Group, Inc. (AIGCFG) operates in Latin America, Europe and Asia
  - In September, there were significant "runs on the bank" in various Asian and European countries
  - Bank runs resulting from the failure of AIG or AIGCFG may lead to systemic risk in certain countries in which it operates



## Extensive Business Disruption

- **AIG Commercial Insurance (AIGCI):**
  - Largest property casualty insurance operation in the United States
  - Underwrites more than 450 insurance products and services across 83 industries
  - Protects and insures approximately 180,000 entities employing over 106 million people in the U.S.
  - Nearly 1/3 of all people in the United States are employed by an entity that is protected by insurance coverage through AIG Commercial Insurance
  - Protects 20 million commercial and individual policyholders & certificate-holders
  - Paid approximately \$18.3 billion in U.S. claims in 2008
  
- **Worldwide, AIG writes insurance for:**
  - 94% of the Fortune 500 – Global, with annual premiums of over \$10.5 billion
  - 97% of the Fortune 500, with annual premiums of nearly \$9 billion
  - 97% of the Fortune 1000, with annual premiums of over \$10.2 billion
  - 81% of the Forbes 2000, with annual premiums of nearly \$15 billion
  - 90% of the Financial Times 500 – Europe, with annual premiums of \$6 billion
  - 77% of the Financial Times 500 – U.K., with annual premiums of \$2 billion

- **AIGCI covers a wide range of business and non-profit organizations, including:**
  - **15,000** farms and agricultural businesses
  - **30,000** commercial and residential contractors, including almost every major U.S. infrastructure project
  - **5,000** schools; school boards; elementary, secondary and higher education facilities; libraries; museums; and art galleries
  - **23,000** non-profit and social service organizations
  - **2,600** energy and environmental organizations, including power utilities, superfund sites, oil and gas exploration businesses, alternative energy concerns and electric utilities
  - **21,000** healthcare providers, including doctors, medical facilities, hospitals, and nursing homes.
  - **7,000** real estate businesses including real estate agencies, commercial and retail buildings and mobile homes
  - **9,800** transportation and travel concerns, including airlines, busses, trains, cargo ships, hotels, taxi cab companies and trucking companies
  - **550** public entities including local governments, water authorities, airport authorities, housing departments, community development administrations and police and fire departments



## Extensive Business Disruption (cont.)

- **Consequences of a failure of AIGCI include:**
  - AIGCI would immediately write less business and many businesses would cancel their existing policies, causing a substantial impact on cash flow
  - In the event of negative cash flow, AIGCI would start liquidating its investment securities, including its municipal bonds holdings (AIGCI is the second largest U.S. investor in municipal bonds)
  - As clients turn to other carriers, the loss of AIGCI’s capacity in the marketplace would significantly drive up the cost of securing property-casualty insurance
    - Given AIGCI’s higher tolerance for insuring riskier businesses, premium raises would be especially substantial in riskier industries, including financial services and automotive, and in riskier lines of business, such as property and terrorism
    - Price increases could lead to smaller businesses “self-insuring” for some risks
  - AIGCI is the primary U.S. incorporated insurer offering comprehensive global policies for multinationals; these businesses would therefore turn to foreign-owned competitors to meet their significant and complex insurance needs
  - Residual market facilities (insurers of last resort) would see significant increases in new business, resulting in further financial strain on states and other insurers (who would be assessed)



## Extensive Business Disruption (cont.)

- **American International Underwriters (AIU) is a leader in providing commercial insurance worldwide:**
  - AIU has a presence in approximately 85 countries, and has the unique ability to provide multi-national coverage to U.S. and foreign companies all over the world
  - In personal lines (PL), AIU insures 36 million households worldwide
  - AIU is a leader in financial lines (FL):
    - Covering 70% of the top 50 international banks
    - Leading the writing of directors and officers (D&O) insurance for large corporations globally
    - Providing significant capacity for U.S. exposures in the London market
  - The AIU Lloyd's Ascot syndicate provides significant capacity in U.S. catastrophic excess coverage (Cat Excess)
  - Combined with Cat Excess, AIU is the largest capacity provider in the world to the top 50 global banks
  - AIU insures the U.S. military, the U.N., U.S. and foreign embassies, and important commercial and other organizations worldwide, including the Panama Canal, oil rigs, trucking, marine cargo and Doctors without Borders
  - AIU's Defense Base Act program provides coverage to contractors in support of the rebuilding of the infrastructure in Iraq and Afghanistan
  - AIU has over 20,000 employees and over 70,000 agents globally



## Extensive Business Disruption (cont.)

- **Consequences of a failure of AIU include:**
  - Increased financial stress on airlines in view of AIU's leadership position in aviation insurance:
    - AIU was a leader in putting planes back in the air after 9/11 by developing new capacity. This helped to restart the economy and stabilize personal and business travel.
    - AIU currently insures 20% of the global aviation market. If AIU exits the market, there would be an immediate move by remaining carriers to rapidly increase rates. Airlines are already under severe financial stress and this would add to their difficulties.
  - Major disruption in accident and health (A&H) insurance markets worldwide, particularly in Asia Pacific where AIU is a market leader in major economies (including Japan, Korea and China).
  - Significant loss of capacity in commercial D&O and FL D&O:
    - AIU's total exposure is close to \$500B. Commercial D&O is estimated to be \$450B and FL D&O and personal lines are approximately \$33B.
    - Without AIU's capacity in FL, there would be a shortfall in capacity, which would cause a tightening of terms and conditions and a resulting large premium increase. Many of the largest global banks would be unable, at any price, to replace AIU's capacity and expertise.
    - The commercial D&O market would be less accessible since insurers would opportunistically increase pricing.
    - It would be difficult to replicate AIU's international network that allows AIU to issue D&O underlyer policies for multinational customers in 85 countries, leaving many multinational customers exposed in local countries.
  - A failure of AIU may disrupt international trade:
    - AIU is one of the top 3 suppliers of coverage for ocean cargo, the vessels that transport goods and the ports that receive and handle those goods.
    - AIU provides product liability coverage to exporters (e.g., AIU is the number 1 provider of export product liability coverage in China).





## Impact on Global Capital Markets

- **An AIG failure could have similar or worse consequences on the global financial markets as that of the Lehman bankruptcy.** Similarities include:
  - **The large size of their derivatives books:** AIG Financial Products Corp. (AIGFP) has approximately \$1.6 trillion in notional derivatives exposures
    - Unwinding of the portfolio in an AIG failure would likely cause enormous downward pressure on valuations across a wide range of associated asset classes
  - **The large number of counterparties** involved in a wind-down of the derivatives books.
    - Counterparties include top banks, sovereign wealth funds, money managers and hedge funds
    - Total client base: more than 1,500 major corporations, governments, and institutional investors would be affected
- **Widespread impact of ratings downgrades**
  - Certain AIGFP contracts include a ratings downgrade as an “event of default;” all AIGFP contracts include bankruptcy as an “event of default,” providing a termination right to each counterparty
  - Downward pressure on values of underlying assets resulting from terminations of and the calls pursuant to the underlying and associated contracts
- **Spotlight: U.S. Municipal Market**
  - **2nd largest holder of U.S. municipal bonds:** AIG’s commercial insurance (AIGCI) business has more than \$70 billion of invested assets, 73% in U.S. municipal bonds. A forced sale of AIGCI’s investment portfolio would significantly stress the U.S. municipal bond market



## Direct and Indirect Impact of AIGFP failure

### Effect of FP Failure

### Parties affected

AIG FP / AIG debt  
(issued securities)

- Inability to repay a significant portion of \$30 billion of AIGFP issuances, including commercial paper issuances
- Signal to markets that debt of other entities with government support at risk

- Institutional Investors
- Retail Investors
- Entities with government support

Benefit Responsive Options ("BROs")

- Failure to provide a wrap on \$38 billion of stable value funds could result in millions of lost value on money market positions potentially "breaking the buck"
- Massive retail investor withdrawals may occur on stable value funds and damage confidence in 401(k) plans
- May in turn prompt sponsors to make individual investors whole

- Retail Investors
- Pension Funds
- Large Mutual Fund Complexes

Credit Protection on Corporate Arbitrage and CDOs / CLOs

- Credit protection on ~\$63 billion in CDOs / CLOs may be eliminated
- Major U.S. banks would lose hedges on correlation books – consequent higher CDS spreads for major corporates will raise funding costs across economy
- Widening spreads and illiquidity in CDO and CLO market could lead to dramatic further write-downs

- Major banks
- Corporate Borrowers
- Institutional Investors

Regulatory Capital

- European Banks could need to raise additional ~\$10 billion in equity capital rapidly – could result in multiple downgrades resulting in catastrophic market disruptions

- Major European Banks
  - e.g. RBS, SocGen, BNP, Banco Santander, Danske, Rabobank, Credit Logemont, Calyon

Other Derivatives (Rates, FX, Equities, Commodities)

- Forced client terminations will result in massive spread widening and significant unhedged positions
- Disrupted markets could cause large losses for dealer / bank counterparties as they attempt to replace lost positions with AIGFP
- Risk in individual unhedged portfolios could jump by 20-30x from current levels

- Corporations
- Supra-nationals
  - e.g. World Bank/IFC, IBRD, EIB
- Dealers

Guaranteed Investment Contracts ("GICs") / Leases

- Failure to collateralize \$2 billion in GICs / Leases would lead to downgrades, and further disruption to the municipal bond markets

- Municipalities



## Impact of Failure of ILFC

- International Lease Finance Corporation (ILFC) is the largest aircraft lessor in the world, with more than 950 aircraft
- ILFC's role in U.S. Economy:
  - Since 1978, ILFC has purchased more new Boeing aircraft (approximately 670 units) than any other airline or leasing company
  - ILFC is the largest commercial customer of General Electric (engines), Honeywell, Rockwell Int'l (avionics) and United Technologies (engines/APU)
  - ILFC is the largest buyer of U.S. made engines and components for new Airbus aircraft
  - ILFC has 102 new jets on order from Boeing as of December 2008, with a value of \$12.5 billion, for deliveries in 2009 and beyond
  - ILFC's new Boeing planes are primarily for export, helping U.S. balance of payments, via long term leases to foreign airlines
- A failure of ILFC may lead to:
  - Loss by Boeing of its largest customer, including \$12.5 billion of forward order book, which may result in reduction in Boeing's 183,000 strong workforce
  - ILFC may be forced to liquidate its 1,000-plane aircraft portfolio at distressed prices, severely impacting the already weak aircraft industry
  - Losses to U.S. banks and U.S. institutional holders of ILFC debt (currently \$30 billion+ )
  - Less taxable income due to distressed sale prices (current potential taxable gain of \$13.1 billion)



## Seizure of foreign assets

- **An AIG failure would likely result in the immediate seizure of certain insurance businesses of AIG by domestic and foreign regulators.**
  - The seizure by one regulator in a given region (*e.g.*, Asia) would almost certainly have a domino effect and lead to the seizure of insurance businesses in multiple jurisdictions across the region
  - Once these assets were effectively nationalized they would be out of the reach of the U.S.
  - Given the substantial “footprint” of AIG’s insurance presence in these regions, the consequence of a seizure would significantly impair, if not cripple, the entire insurance industry within certain regions
  - Even if there is not an immediate seizure of the insurance businesses, there will be significant policy cancellations which will likely lead to seizures
  
- Seizure of foreign assets could lead to:
  - Loss of assets to repay the Federal Reserve
  - Collapse of AIG’s public debt
  - Loss of value of the U.S. Treasury’s Preferred Shares

# AIG Conclusion

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- Insurance is the oxygen of the free enterprise system. Without the promise of protection against life's adversities, the fundamentals of capitalism are undermined.
- The failure of the world's largest insurer at a time of major global financial and economic instability will exacerbate the challenge of reigniting consumer confidence.
- Since life insurance has changed greatly in character over the last two decades – from just a basic provision of death and disability benefits to a vehicle for retirement savings and wealth accumulation – the effects of disrupting the industry are wide-ranging and significant.
- There is a legitimate public policy rationale for regulatory reform of the industry, and the federal government's continuing role in AIG's destiny would be consistent with such a policy direction.