

Four views of the US financial system

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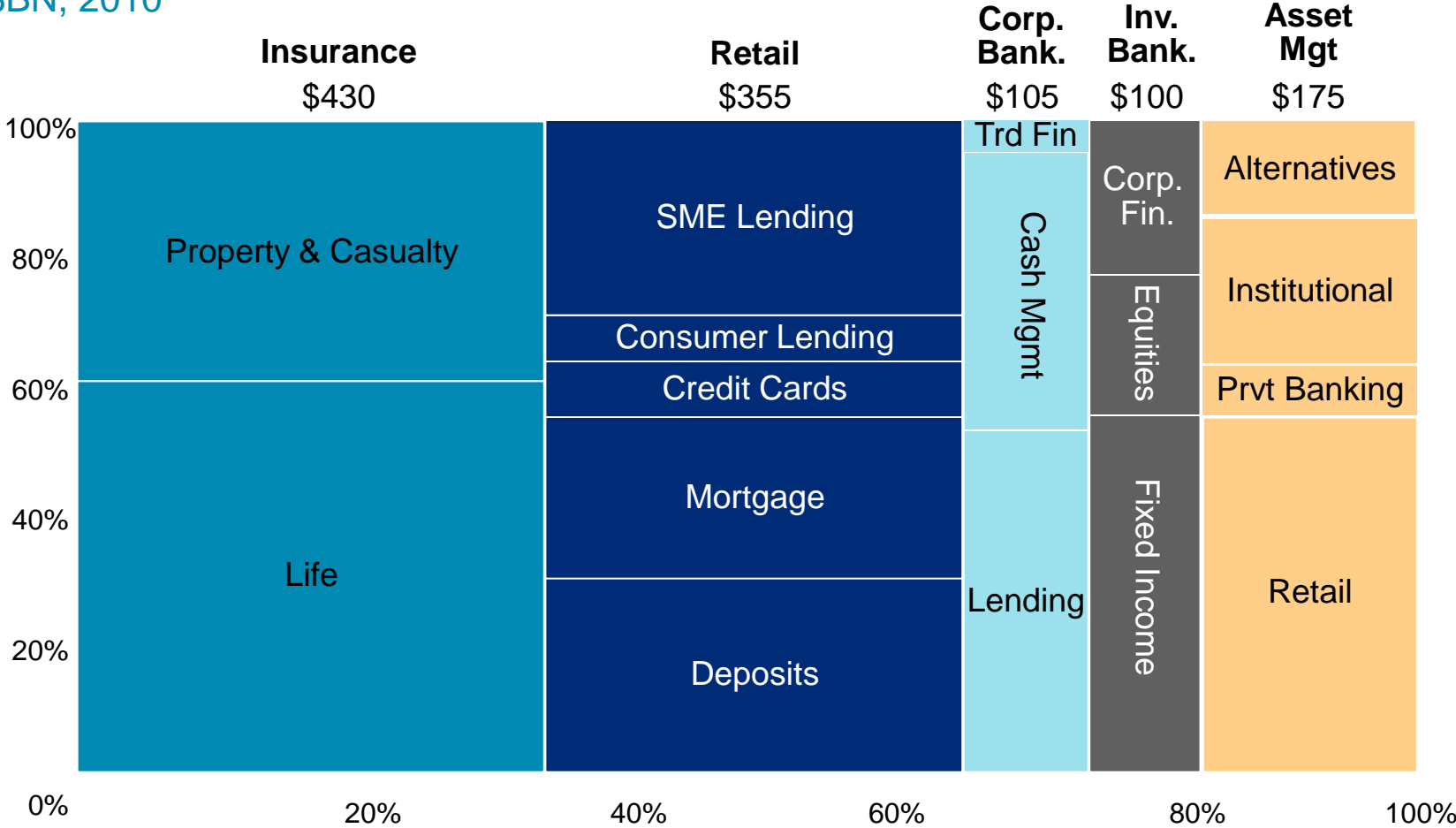
Summary

Four views of the US financial system

- **Business line view:** Financial system businesses generate > \$1 TN in annual revenue across five major business lines
- **Structural asset-liability view:** Financial gearing of real economy has increased, while securitization further multiplied claims within the financial system
- **Comparative view:** US financial system is big, unbundled, less bank-centric, and complex
- **Evolutionary pressure view:** Financial system innovations and practices have been driven by the wish to reduce the amount of credit evaluation that must be done

US financial services – by business line

Revenues by financial services business, total = \$1.2 TN
 \$BN, 2010

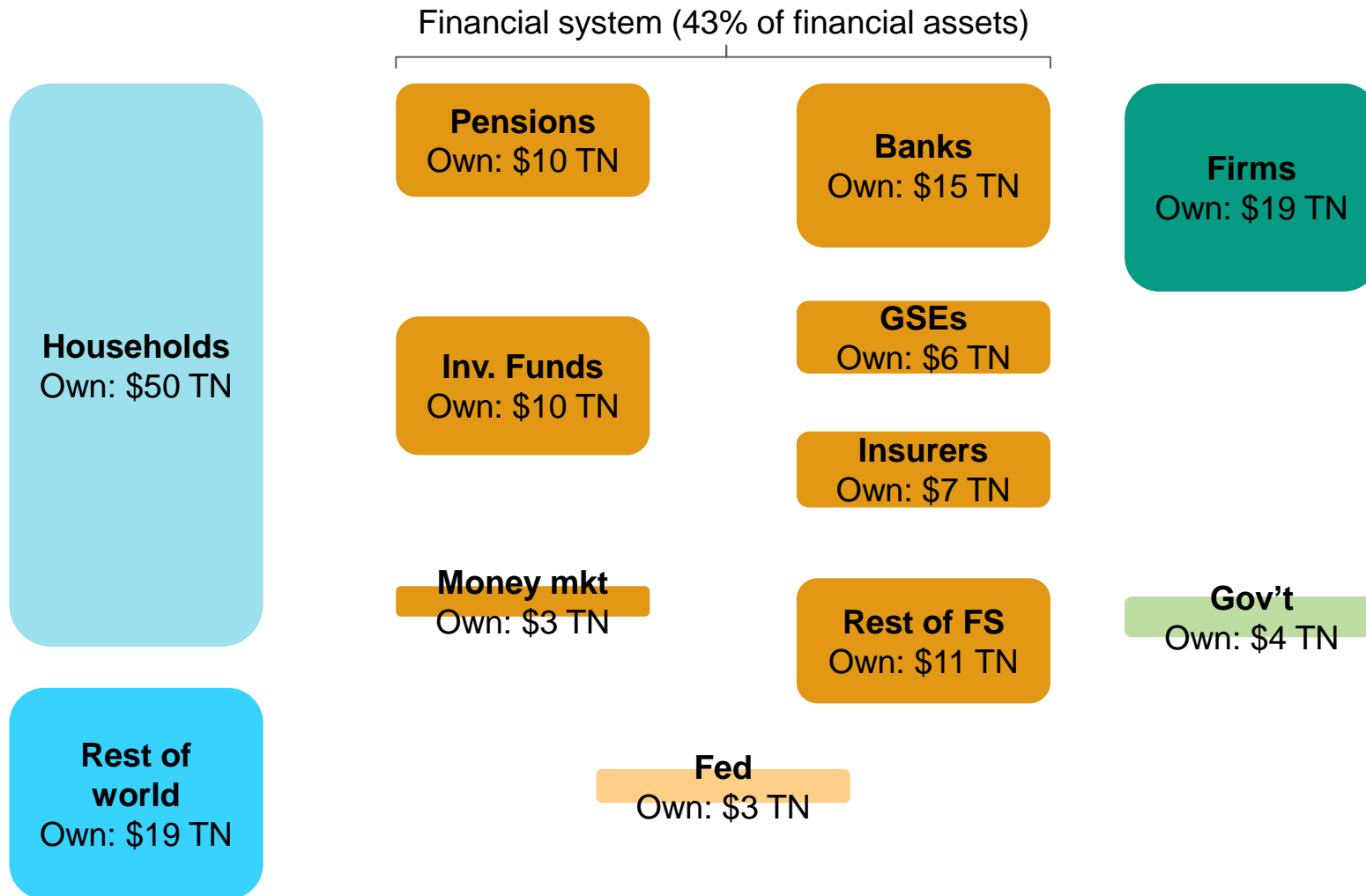


Source: Oliver Wyman analysis

Today, total financial claims are ~10 times GDP

Financial assets held, by economic sector 2011

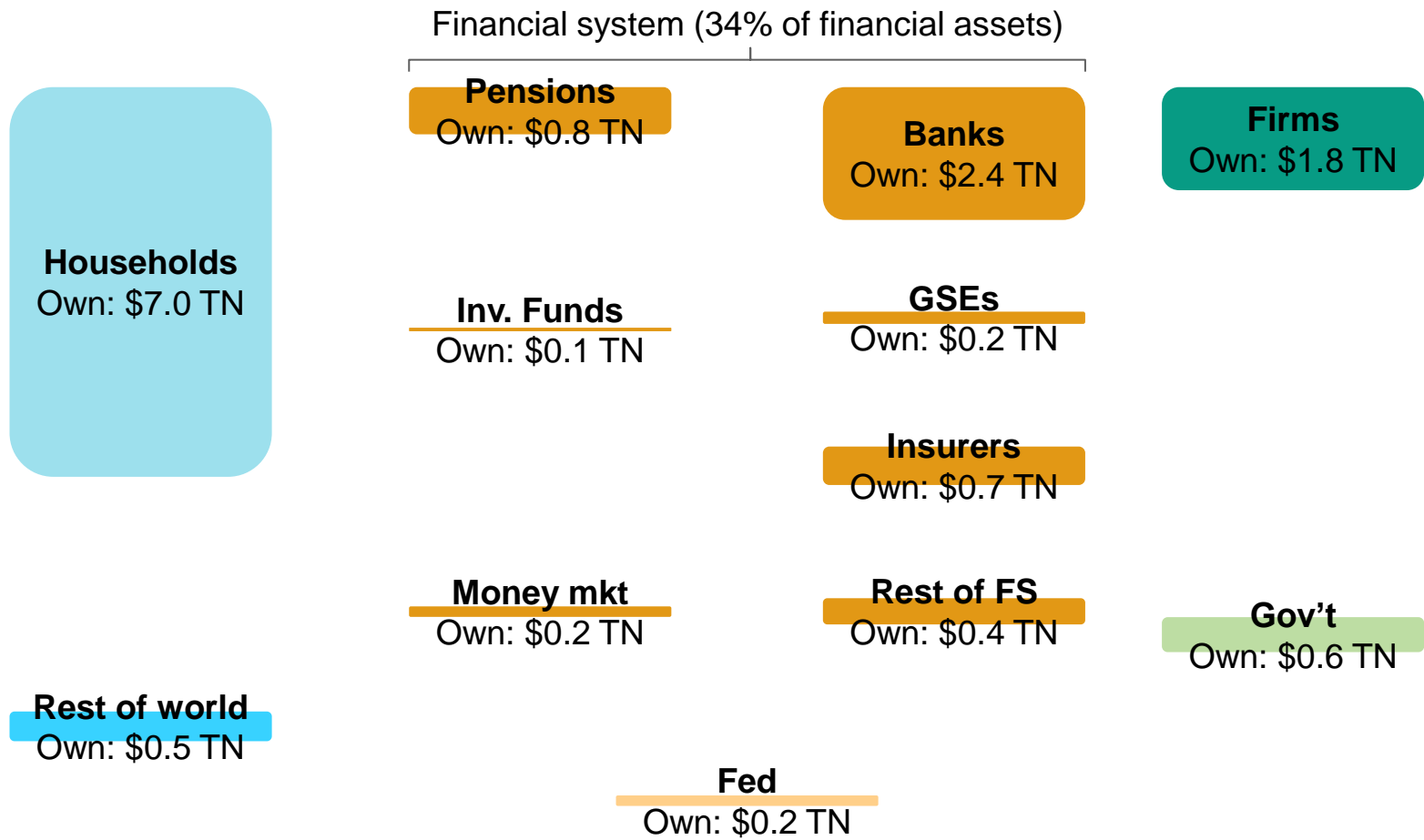
Scale:
2011 GDP
\$15 TN



Thirty years ago, financial claims were less than 5 times GDP

Financial assets held, by economic sector 1981

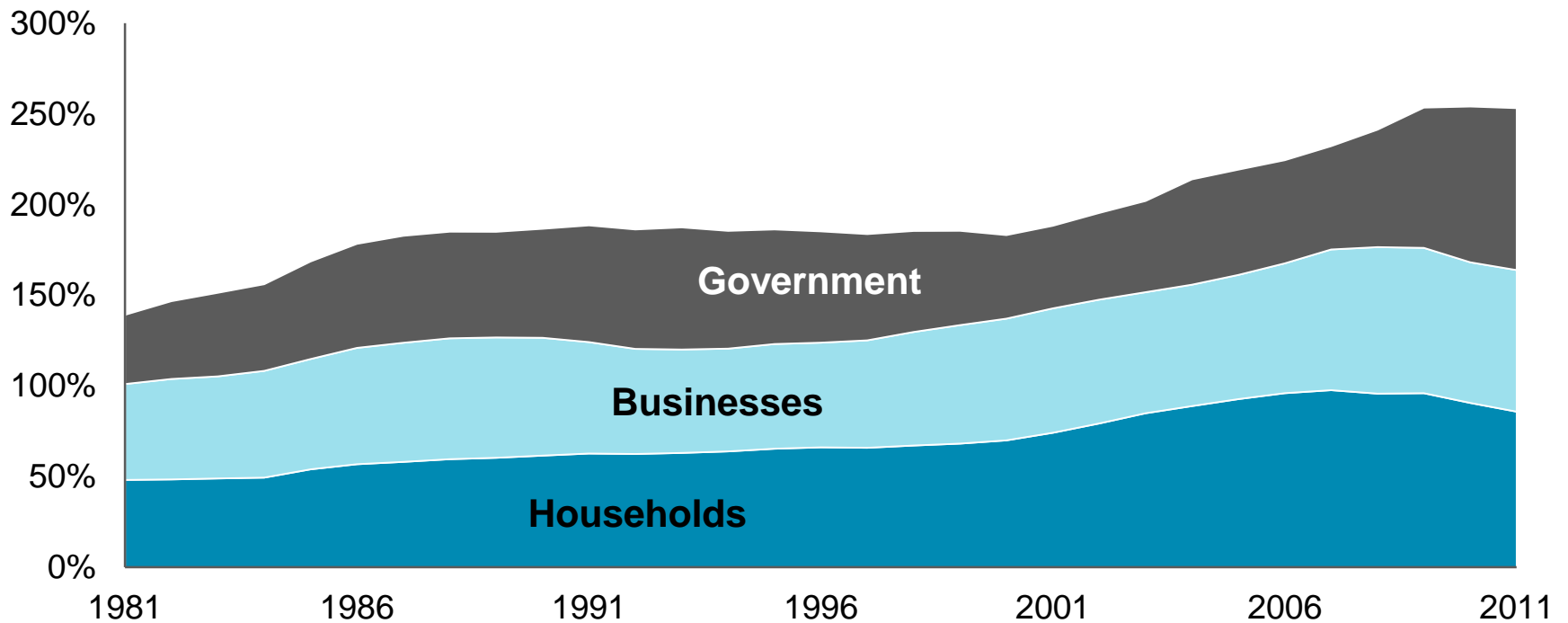
Scale:
1981 GDP
\$3.1 TN



Source: Flow of Funds Accounts of the United States

Nonfinancial sectors have taken on more debt per unit of economic activity...

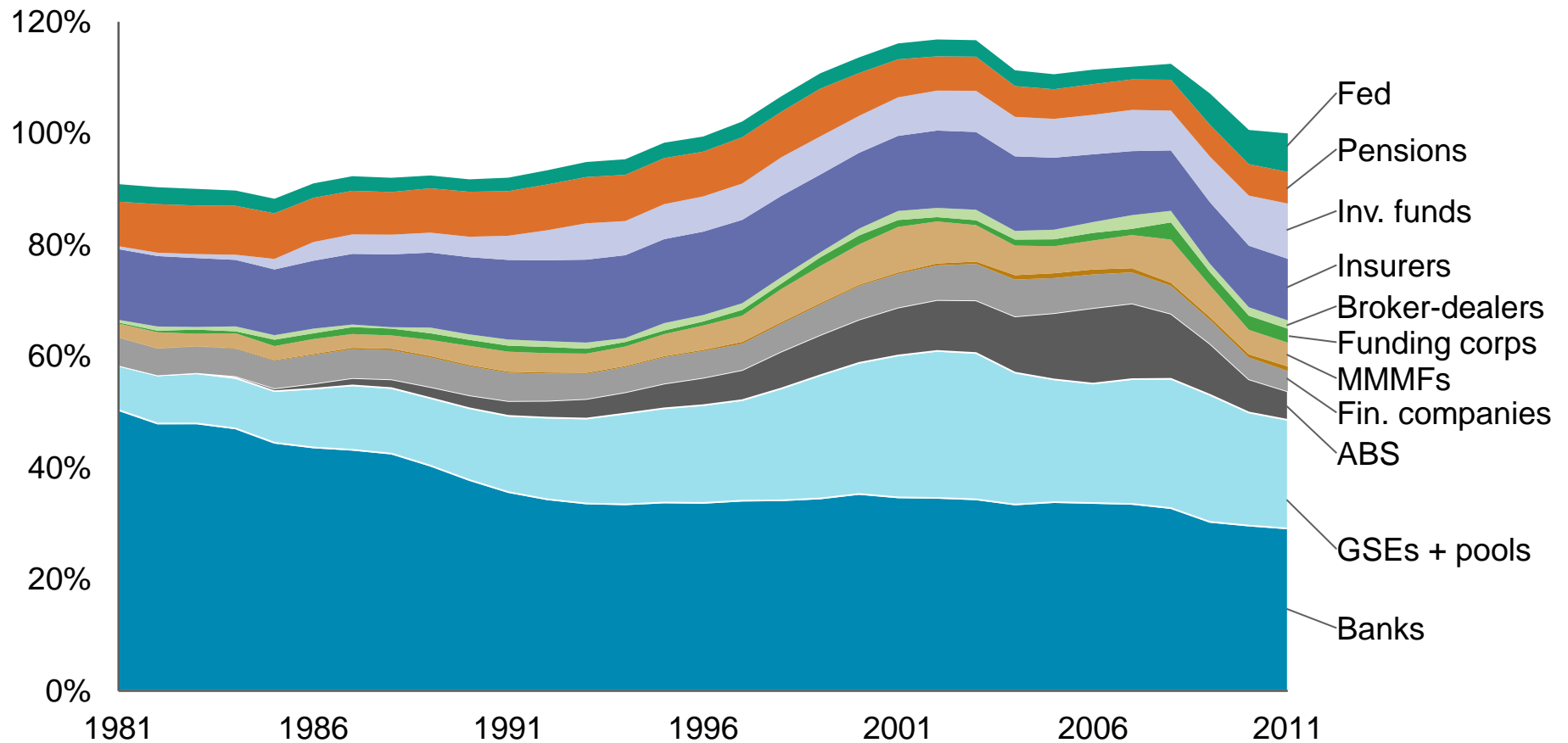
Credit owed by US nonfinancial sectors, as a percentage of GDP 1981-2011



Source: Flow of Funds Accounts of the United States

...while daisy-chaining of credit via securitization increased the “credit multiplier” applied to claims on the real economy

Financial sector credit assets, as a percentage of credit owed by nonfinancial sectors 1981-2011



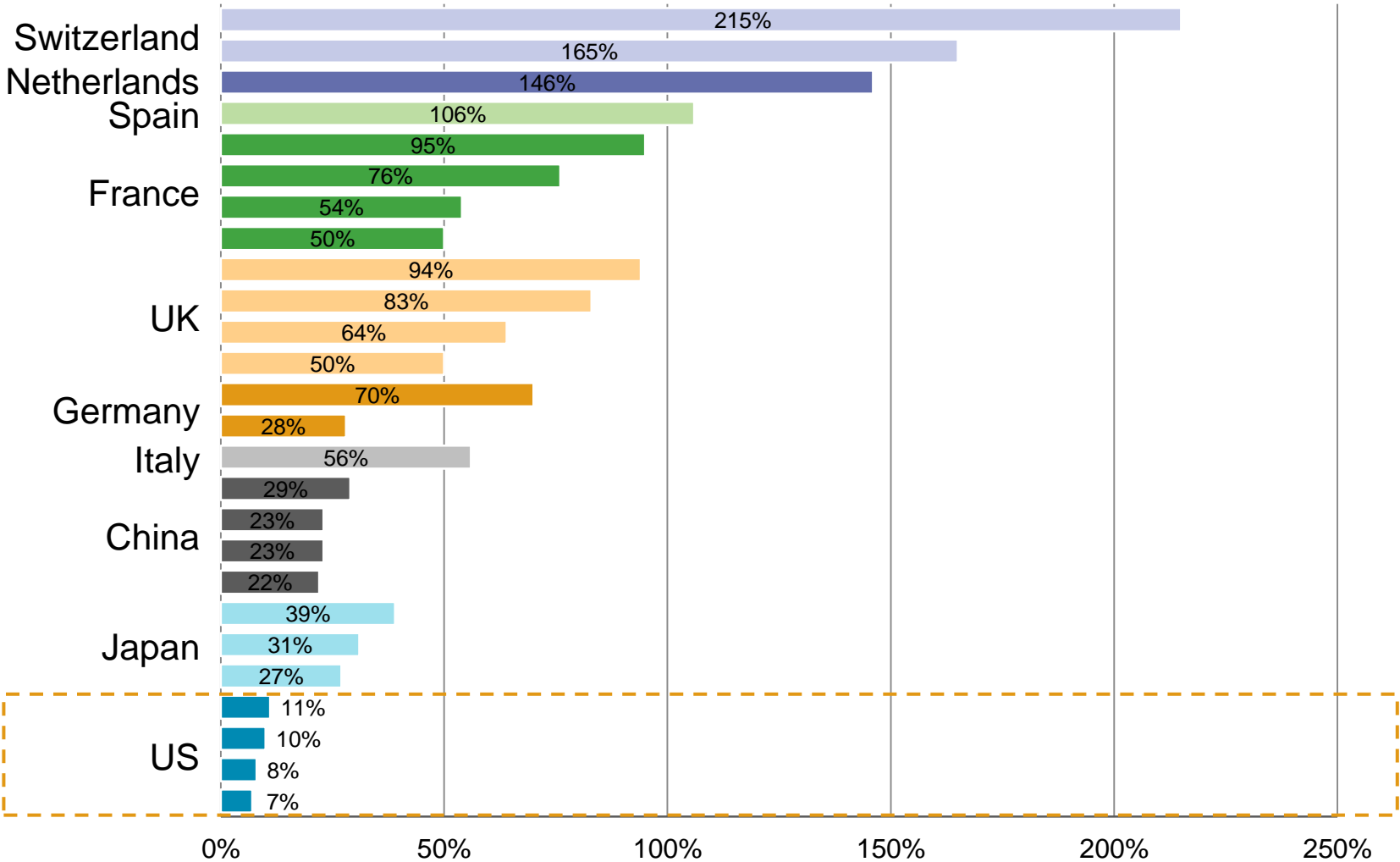
Source: Flow of Funds Accounts of the United States

How the US financial system is different

- More credit intermediation via markets and nonbanks, less dominant role for banking system
- Lots of small banks
- GSEs
 - Subsidized mortgage asset funding
 - Hold mortgage credit risk, and significant amount of prepayment (convexity) interest rate risk
- Many different regulatory bodies, but increasingly same rules for major players
 - BHCs (including absorbed/converted dealers and finance companies) , nonbank SIFIs, foreign IHCs: similar prudential requirements
 - Orderly Liquidation Authority, the universal (in)solvent
- Big domestic economy

US – world's most credible bank guarantor

Assets as a percentage of home country GDP for world's largest banks 2011



Source: Bankers Almanac, Economic Intelligence Unit

Evolution of US financial system has been driven by the desire to reduce (or avoid) the burden of credit evaluation

Technology	Examples	Associated concerns
Collateral	<ul style="list-style-type: none"> • Repo • Sec lending • Prime brokerage 	<ul style="list-style-type: none"> • Asset price and liquidity risk • Operational risk • Substitutes idiosyncratic credit relationships for more systematic market relationships
Credit rating	<ul style="list-style-type: none"> • Corporate, government, ABS ratings • Consumer credit scores (e.g. FICO) 	<ul style="list-style-type: none"> • Model error • Moral hazard
Tranching / priority of claims	<ul style="list-style-type: none"> • Bank liability structure (equity, sub debt, senior debt, deposits) • Private label ABS • CDOs, CLOs 	<ul style="list-style-type: none"> • Moral hazard • Model error • Principal-agent • Conflicts of interest
Credit guarantees	<ul style="list-style-type: none"> • Deposit insurance • Monoline bond insurance • Implicit guarantees (GSEs, investment banks, bank creditors) 	<ul style="list-style-type: none"> • Moral hazard
Liquidity enhancement	<ul style="list-style-type: none"> • Agency MBS securitizations • ETFs • Money market mutual funds 	<ul style="list-style-type: none"> • Asset liquidity risk

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