

The Canadian Mortgage Financing System

Mexico City

November 2009



Outline

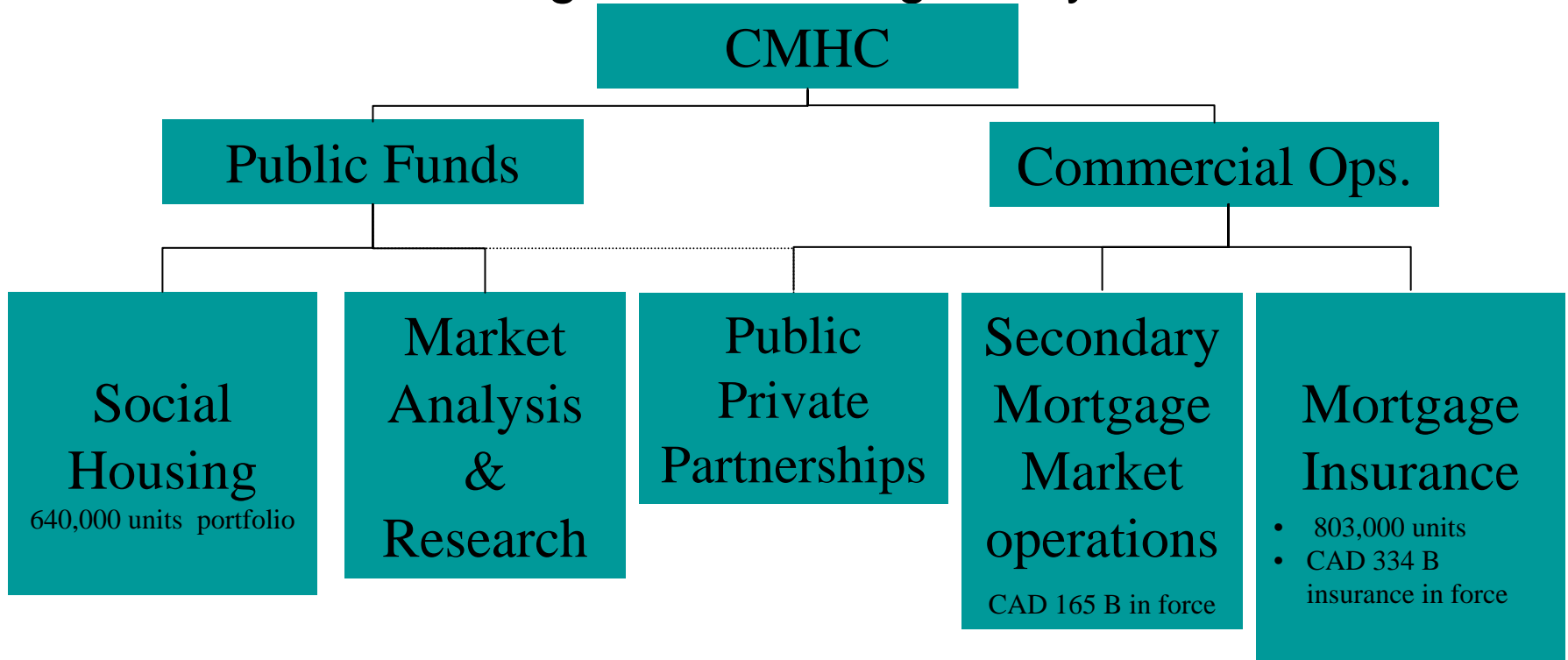
- **Canada Mortgage and Housing Corporation**
- Housing Finance Overview
- Housing Market, Mortgage Debt & Performance
- Mortgage Loan Insurance
- Mortgage Funding/Securitization
- Other Key Differences

Canada Mortgage and Housing Corporation

- **A national housing agency with a mandate to promote:**
 - Housing affordability and choice
 - Housing construction, repair and modernization
 - Improvements to overall living conditions

- **A federally owned Corporation; public agency with a private sector culture/structure:**
 - Majority of Board of Directors members are from private sector
 - Self-managed, but reports activities to Parliament through Minister
 - Profitable and pays corporate taxes

CMHC Mandate: Integrated Housing Policy



Helping those who cannot meet their needs on their own

Maximizing the number who meet their housing needs in the market



Mortgage Insurance in Canada - **Impact**

- 1 in 3 Canadians purchased their home using CMHC MI
- Increased supply of funds by making mortgage lending attractive
- Increased mortgage market competition and reduced rates
- Allowed government to withdraw from direct lending, interest rate subsidies and federal loan-loss guarantee
- Zero risk-based capital required by lenders instead of 4% for non-insured loans
- Standardized mortgage terms and conditions

CMHC STATISTICS

- | | |
|--|------------------|
| <p>Income after taxes (2008)
Million</p> | <p>1,778 \$C</p> |
|--|------------------|

- | | |
|-----------------------------|----------------------|
| <p>Units insured (2008)</p> | <p>919,790 Units</p> |
|-----------------------------|----------------------|

- | | |
|--|------------------|
| <p>Insurance in force (2008)
Billion</p> | <p>407.7 \$C</p> |
|--|------------------|

- | | |
|-----------------------------------|--------------------------|
| <p>Guarantees in force (2008)</p> | <p>233.0 \$C Billion</p> |
|-----------------------------------|--------------------------|

- | | |
|-----------------------------------|------------------------|
| <p>Annual social expenditures</p> | <p>1.9 \$C Billion</p> |
|-----------------------------------|------------------------|

- | | |
|------------------------------|--------------|
| <p>Number of Staff-years</p> | <p>1 888</p> |
|------------------------------|--------------|

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Key Economic and HF Metrics

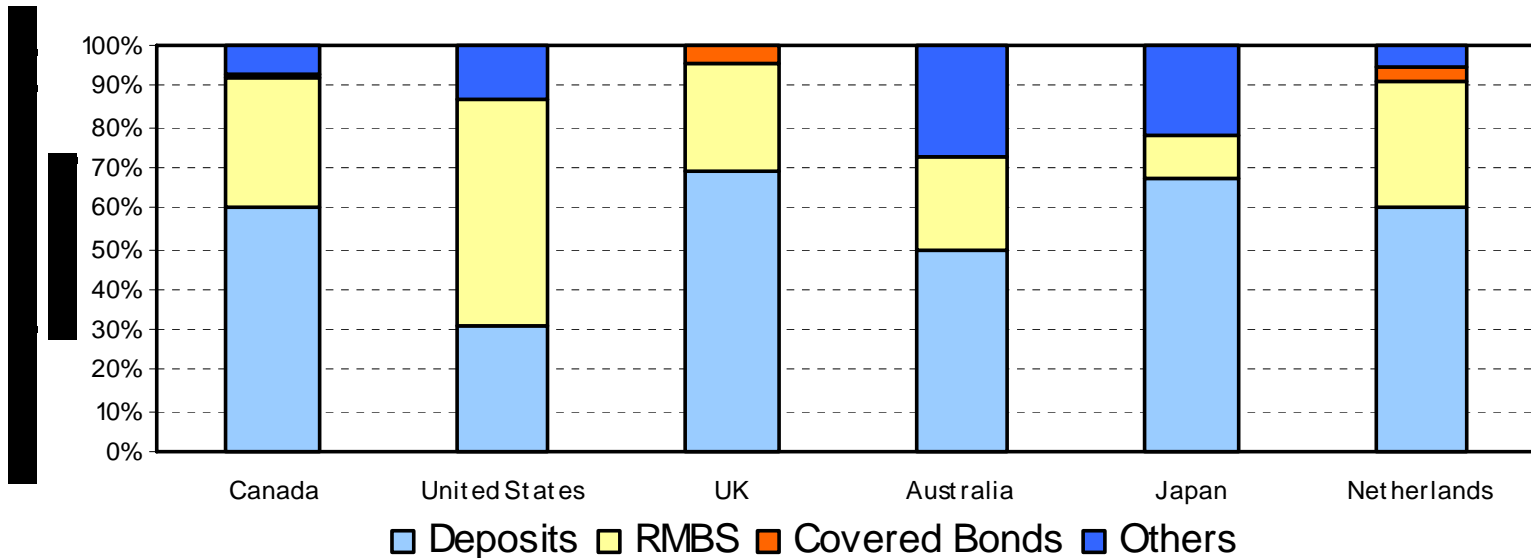
Countries	Country Population (million) (July 2009)	Mortgage Market Size (Total mortgages o/s in local currency)	Mortgage Debt to GDP	RMBS Issuance		Homeownership Rate
				Public	Private	
Mexico	111.2	1,017,172 Million (2008)	10% (2006)	\$USD 690M (2007)	\$USD 2,310 M (2007)	25% (2005)
Canada	33.5	903 (2008)	57% (2008)	\$ 144.9bn (2008)	\$ 0bn (2008)	68% (2006)
US	307.2	11,042 (2008)	78% (2008)	\$ 1,169bn (2008)	\$ 58bn (2008)	69% (2005)
Australia	21.3	1,115 (2008)	94% (2008)	NA	\$ 52.5bn (2007)	70% (2006)
UK	61.1	1,187 (2007)	86% (2007)	NA	\$ 207.1bn (2006)	69% (2005)

Key Contributors to Canada's Robust Housing Finance System

- Banks are required to have mortgage insurance if LTV > 80%
- Canadian mortgages are 'full recourse'
- Mortgage interest is not tax deductible
- An important share of mortgages remains on originators' balance sheets – incentivizing lenders to maintain higher underwriting standards
- Securitization primarily used for liquidity rather than risk transfer
- Government's stable, reliable and timely support programs, e.g. mortgage insurance, securitization, mortgage purchase, etc.

Mortgage Funding Sources

- Deposits are the primary mortgage funding source in most countries, with the exception being the US where securitization funds approximately 60% of mortgages



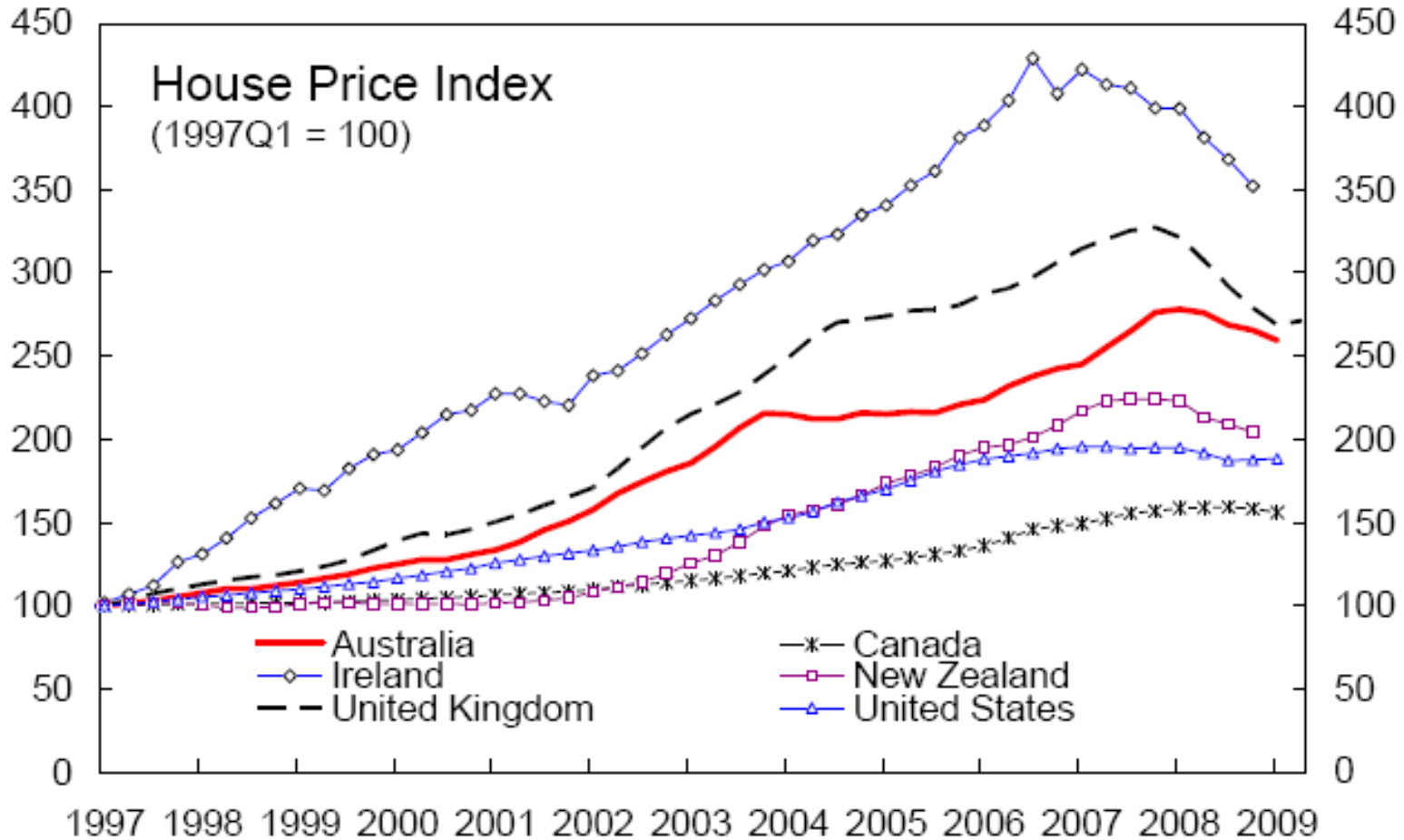
Note: Covered bonds were issued by Canadian and US mortgage lenders recently yet only account for a small part of total mortgage funding in both countries. "Others" vary between countries, often include: wholesale debt funding, whole loan sales

Source: Bank of Canada, CMB Evaluation, Merrill Lynch, Dr. M. Lea, HM Treasury, and Reserve Bank of Australia. Data as of 2009 for Canada, UK, US; 2007 for Australia; 2004 for Japan; 2008 for the Netherlands

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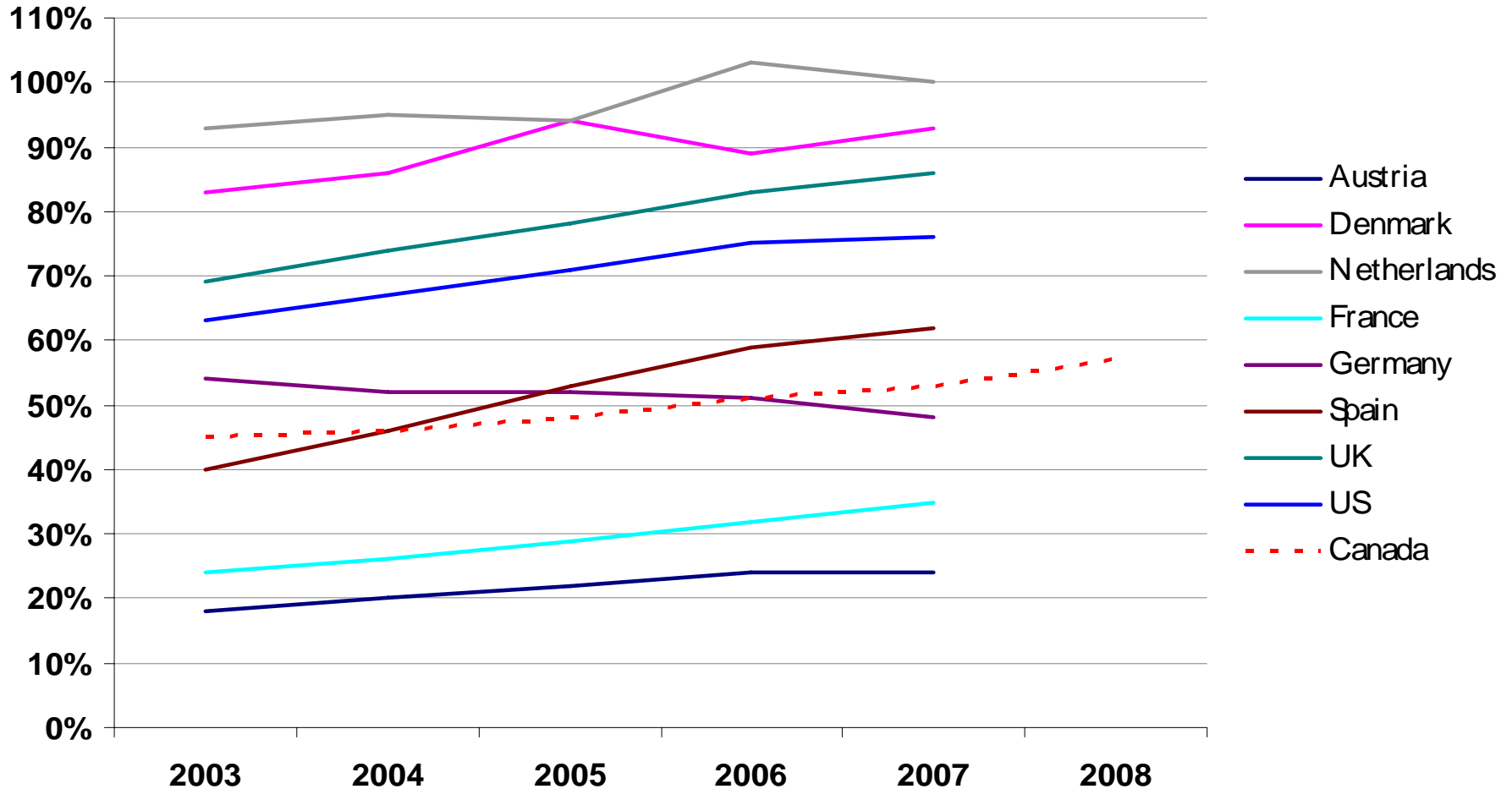
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Canada's House Prices - Moderate Increases



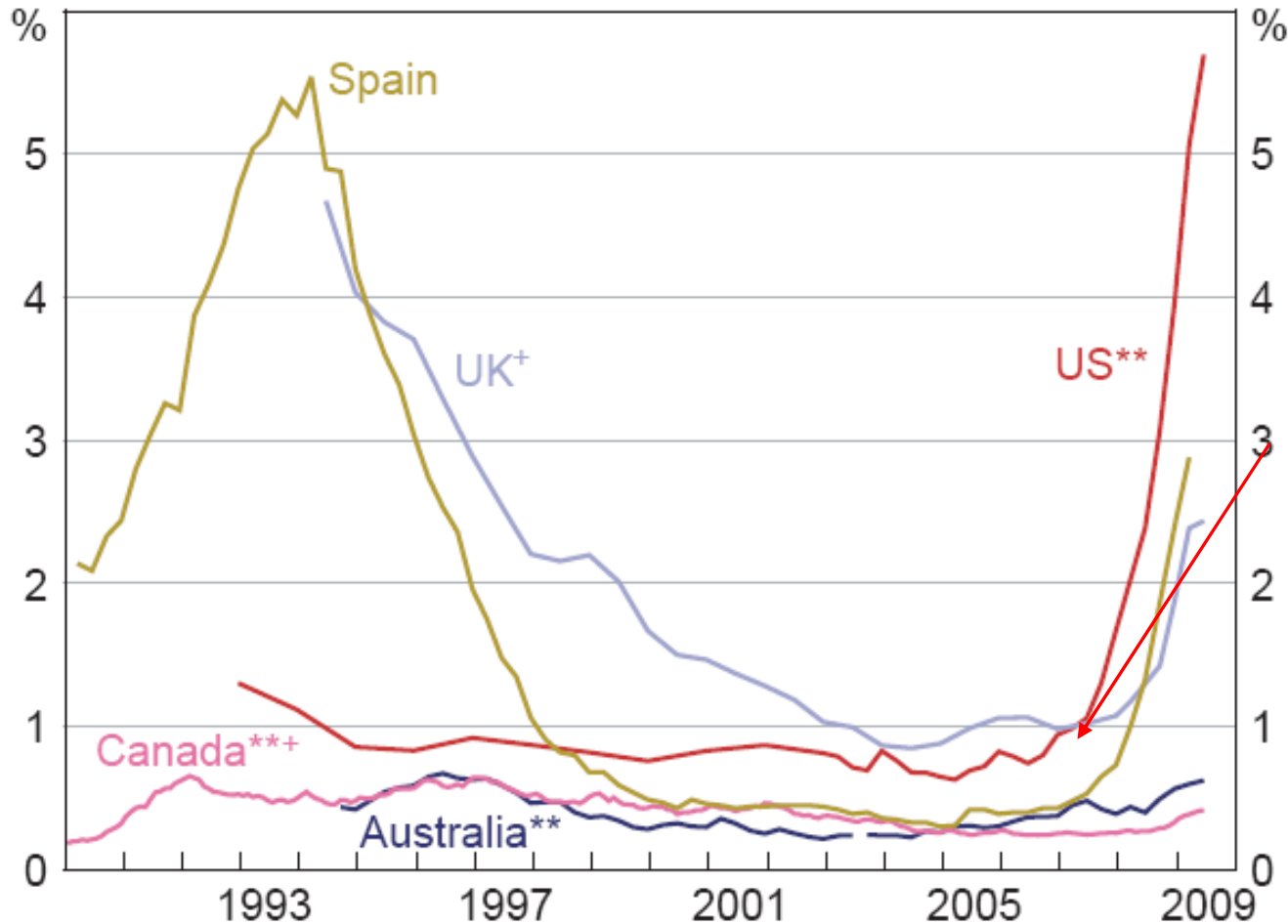
Sources: Haver Analytics Database; and Fund staff calculations.

Canada's Mortgage Debt to GDP - Moderate Mortgage Debt to GDP



Canada's Mortgage Arrears – Much Lower

Percentage of mortgages in arrears
Per cent of loans*



Despite a recent uptick, mortgage arrears remain very low and stable compared to international levels

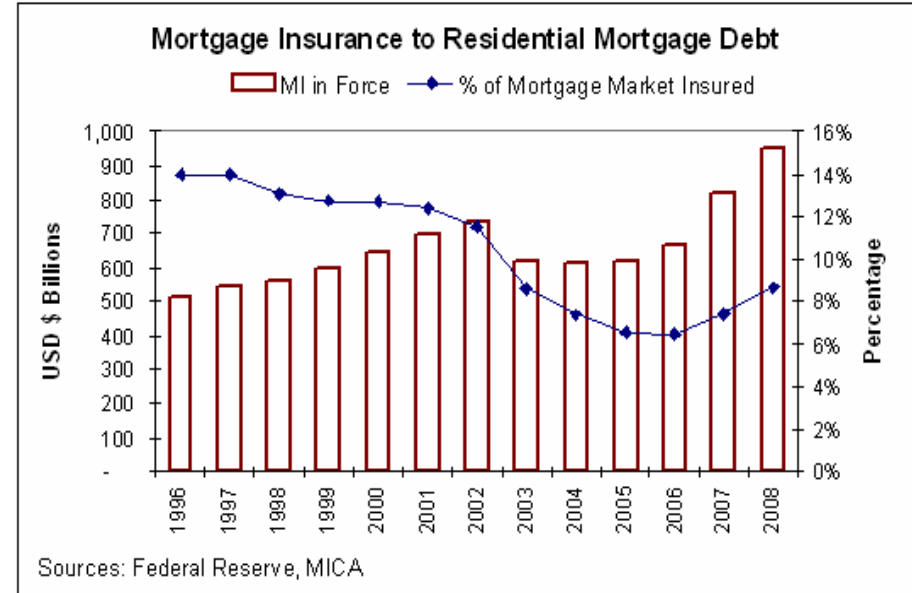
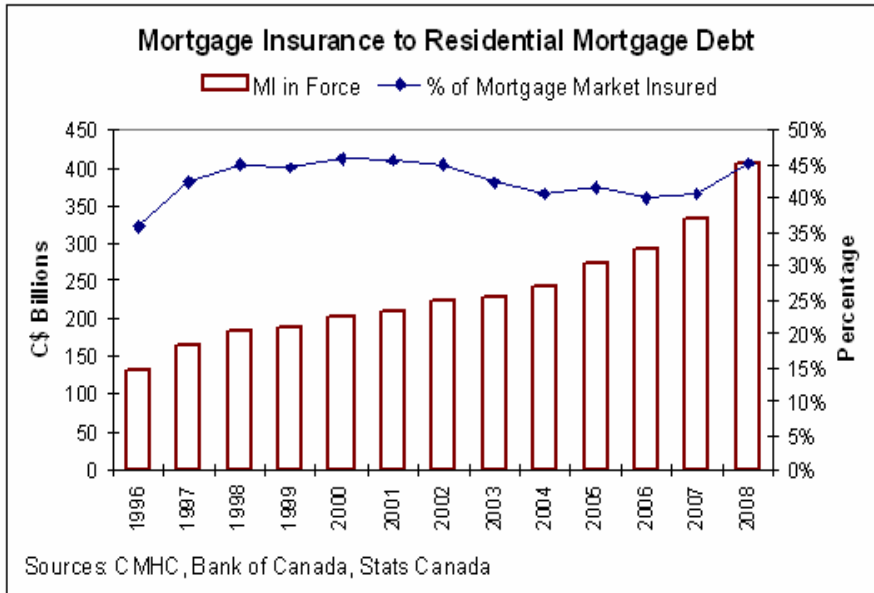
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A Higher Share of Mortgage Insurance to Mortgage Debt in Canada

Canada: (1)

U.S.: (2)



(1) MI in force in Canada based on total CMHC insurance in force.

(2) MI in force in the U.S. based on total private mortgage insurance in force.

- The proportion of insured mortgages is much higher in Canada than in the U.S., thus offering better protection against mortgage credit risk and losses to lenders.
- Government-backed CMHC MI has provided a stable access to mortgage financing to Canadians during the financial crisis.

Canada's Mortgage Insurers – Relatively More Stable

- Despite the withdrawal of recent entrants in to the Canadian MI market, mortgage insurers in Canada generally have been more stable than their U.S. counterparts, and have not been affected by significant writedowns and credit losses.

Financial Strength Ratings and Rating Outlooks of Selected Mortgage Insurers:

	Canada:	U.S.:	Australia:
CMHC	AAA/Stable (1)	NA	NA
Genworth MI	AA-/Stable	BBB+/Stable	AA-/Stable
United Guaranty	A (high)/Stable (2)	BBB+/Negative	NA (3)
MGIC	NA (3)	BB/Negative	NA (3)

Source: Standard and Poor's

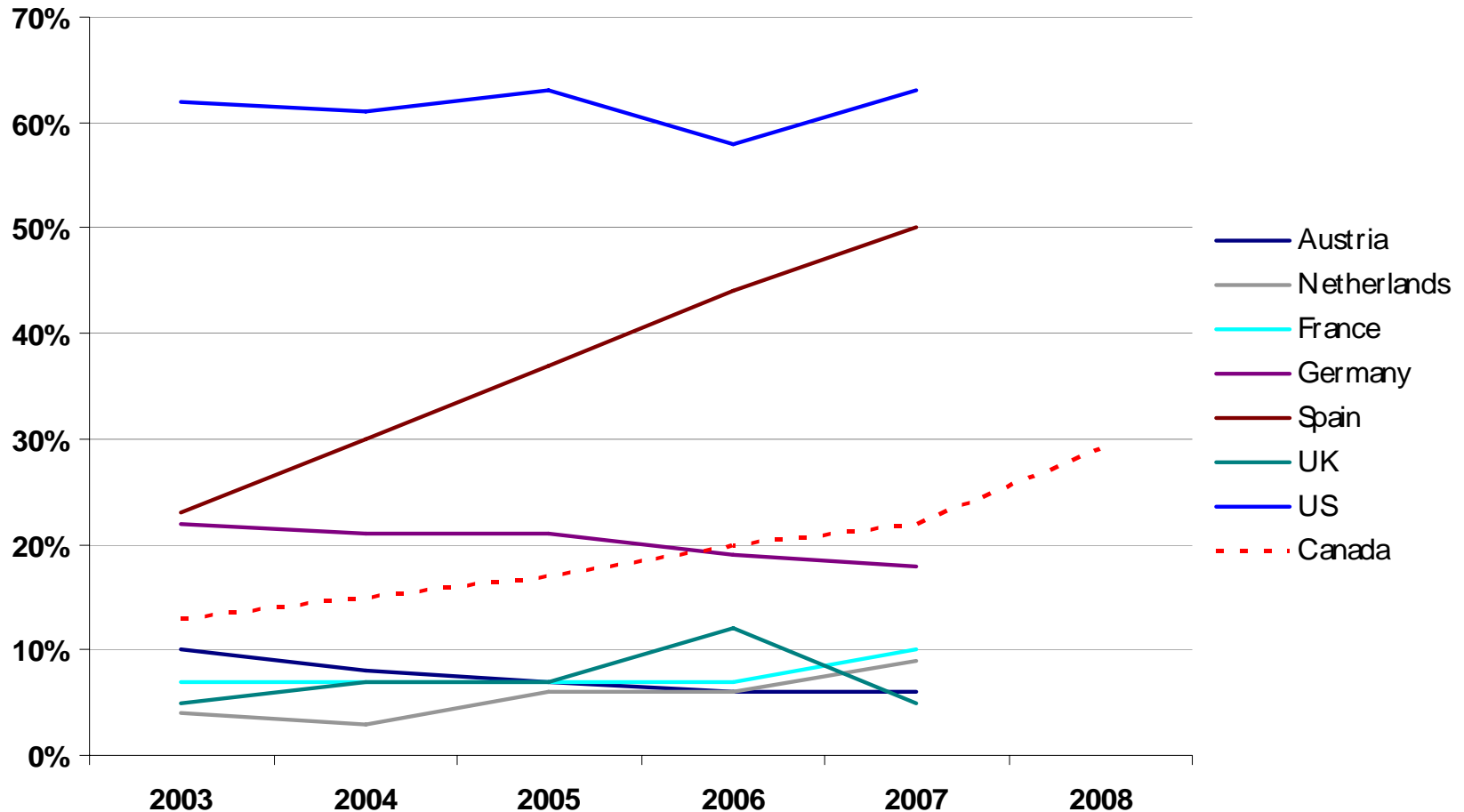
- Issuer rating. S&P does not have any Insurer Financial Strength rating for CMHC.
- Rating from DBRS, United Guaranty Canada is not rated by S&P.
- United Guaranty does not operate in Australia. MGIC withdrew from Canada and Australia in 2008.

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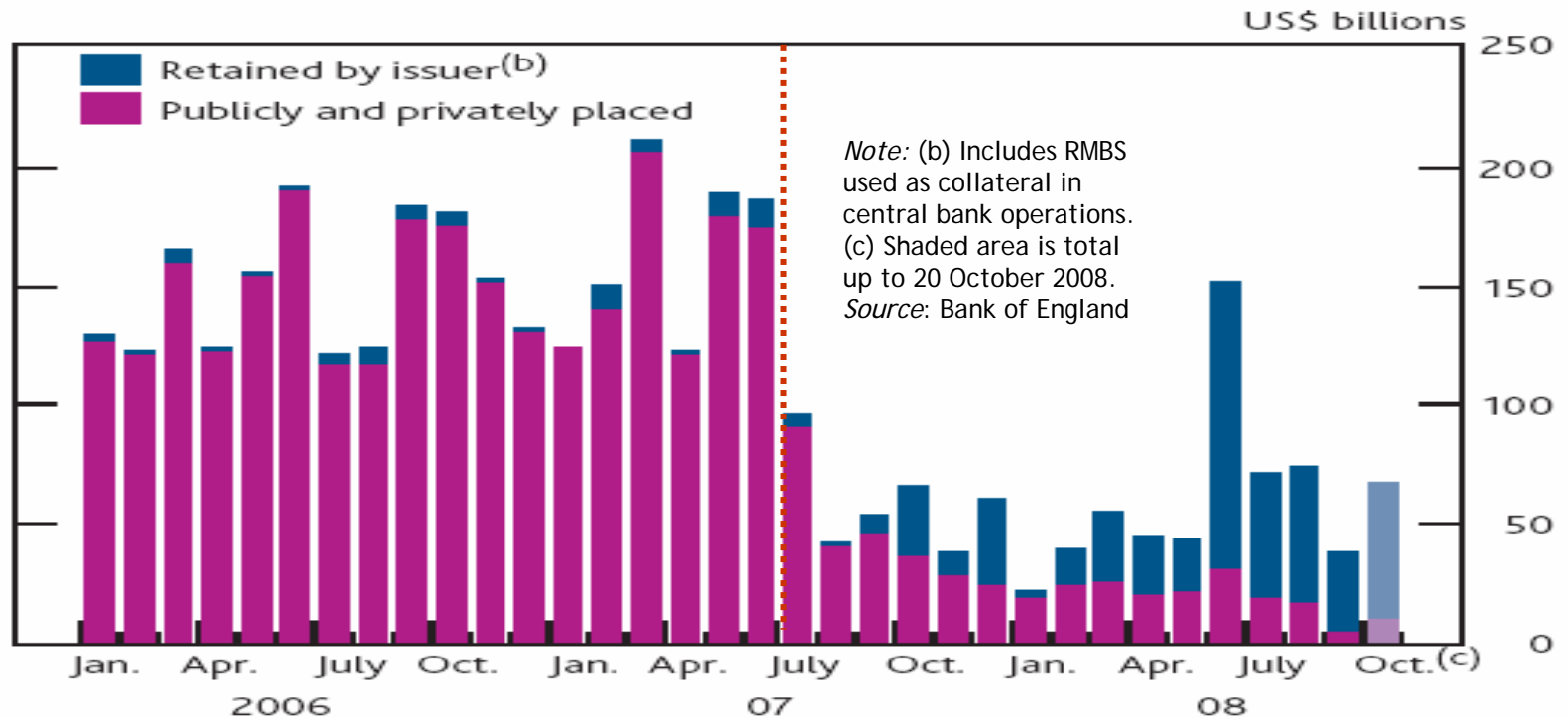
Canada's Mortgage Securitization – Lower Share of Mortgage Debt

Canada's mortgage funding has largely relied on deposits and government-backed securitization, both of which are relative more stable funding sources as compared to other countries



RMBS issuance – Significant Decline

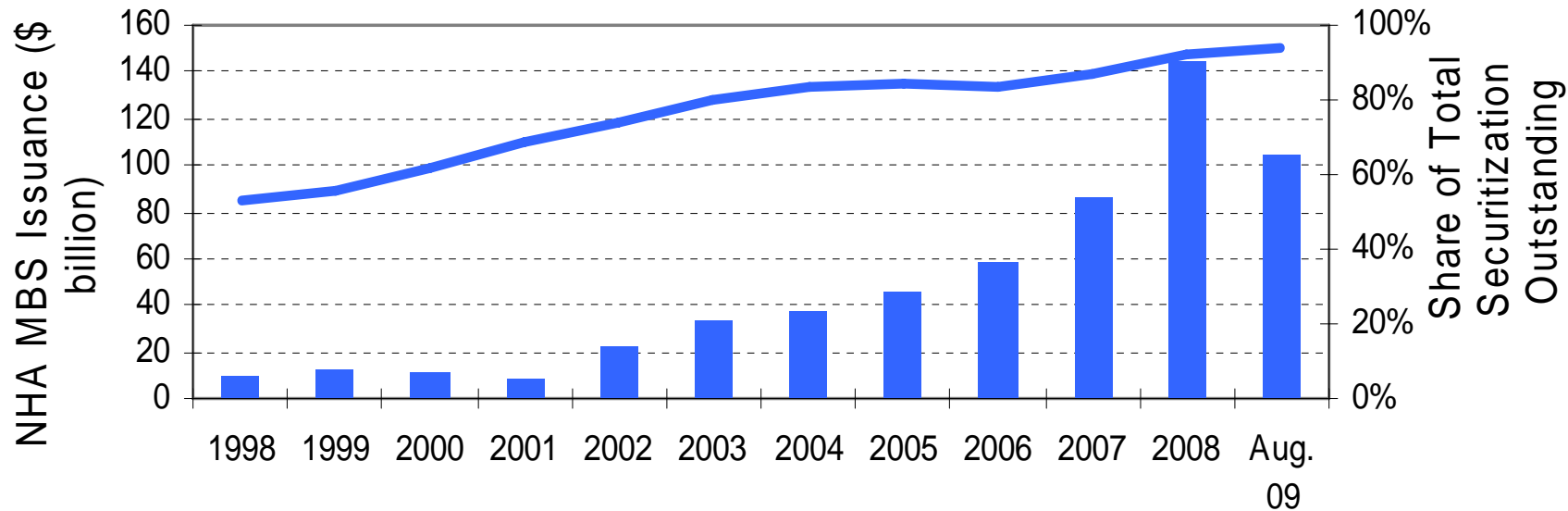
Global residential mortgage-backed securities issuance (a)



Sources: Dealogic and Bank calculations.

- Since July 2007, global private mortgage securitization issuances (e.g. RMBS) have fallen precipitously, reflecting sharp declines in investor demand, and have significantly impacted mortgage funding in many countries.

Canada NHA MBS Issuance - Significant Increase

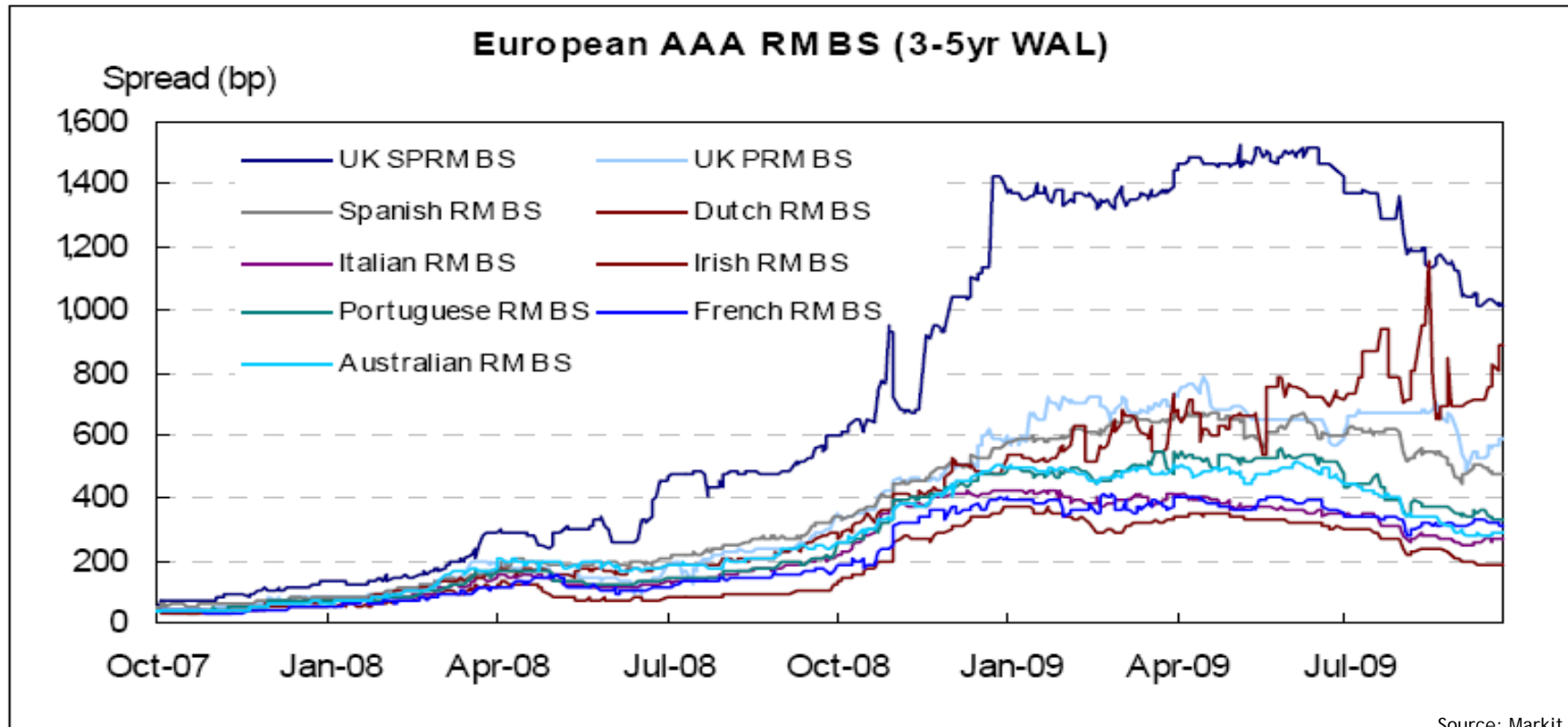


■ Annual NHA MBS Issuance (left scale) — NHA MBS Share of Total Securitization Outstanding (right scale)

Source: Bank of Canada, Residential Mortgage Credit Outstanding

- NHA MBS issuance in Canada, in contrast, has increased significantly, especially since the onset of the credit crunch, to nearly \$145B in 2008, alleviating funding pressures for mortgage lenders.
- Its share of total mortgage securitization has also increased significantly from 53% in 1998 to 94% in August 2009.

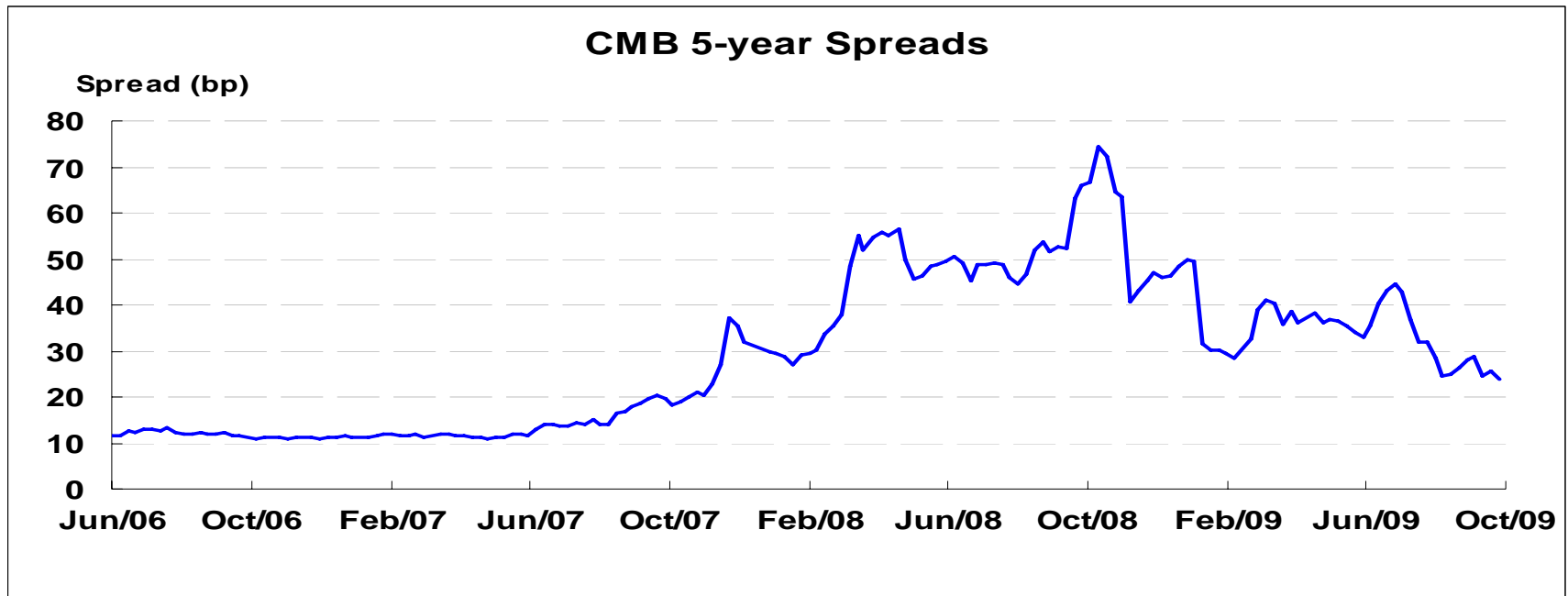
Other Countries



- **Other countries:** Private securitization funding costs (e.g. RMBS spread) have soared to multiples of pre-crisis levels in most countries
- **Canada:** (see next slide) the costs of government-backed mortgage securitization, the major securitization funding source, have also increased, but much less than in other countries

Mortgage Securitization Funding Cost - **Canada**

Source: CMHC



- **Canada:** Securitization funding costs, e.g. the CMB -5 Year bond spread (vs. the Government bond), increased from under 15bps in Jun, 2006 to a high of over 70bps in Sep. – Oct. 2008. However, this increase is significantly less than the increase in RMBS spread experienced in other countries. The CMB funding costs has declined notably in recent months.
- The costs of other major mortgage funding sources increased even more than CMB spreads during the credit crunch, e.g. spread increased to 140bps for 5Y Bank Deposit Notes, 90bps for Covered Bonds in February 2008. Thus, CMB's relative advantage and importance as a funding source actually improved.

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Other Key Differences in Canadian system

- Types of Mortgages – Renewable versus fixed
- Type of Insurance provided - 100%
- Type of guarantee provided on NHA MBS and CMB's
 - Unconditional
 - Full and timely payment
 - Explicit versus implied Government Guarantee
 - All pooled mortgages are 100% insured

Other initiatives

- Shorter amortization periods
- No 100% lending for insurance
- Government sponsored auction process for on balance sheet loans
- Improve clarity in disclosures

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