



Seðlabanki Íslands

Household debt, restructuring and risks

Household debt workshop

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The opinions expressed herein are those of the author and do not necessarily reflect the opinions or policy of the Central Bank of Iceland.

Overview of presentation



Crisis and scope of distress

- Scale and nature of distress-

Policy measures

- Debt restructuring and direct reduction-

Where are we now

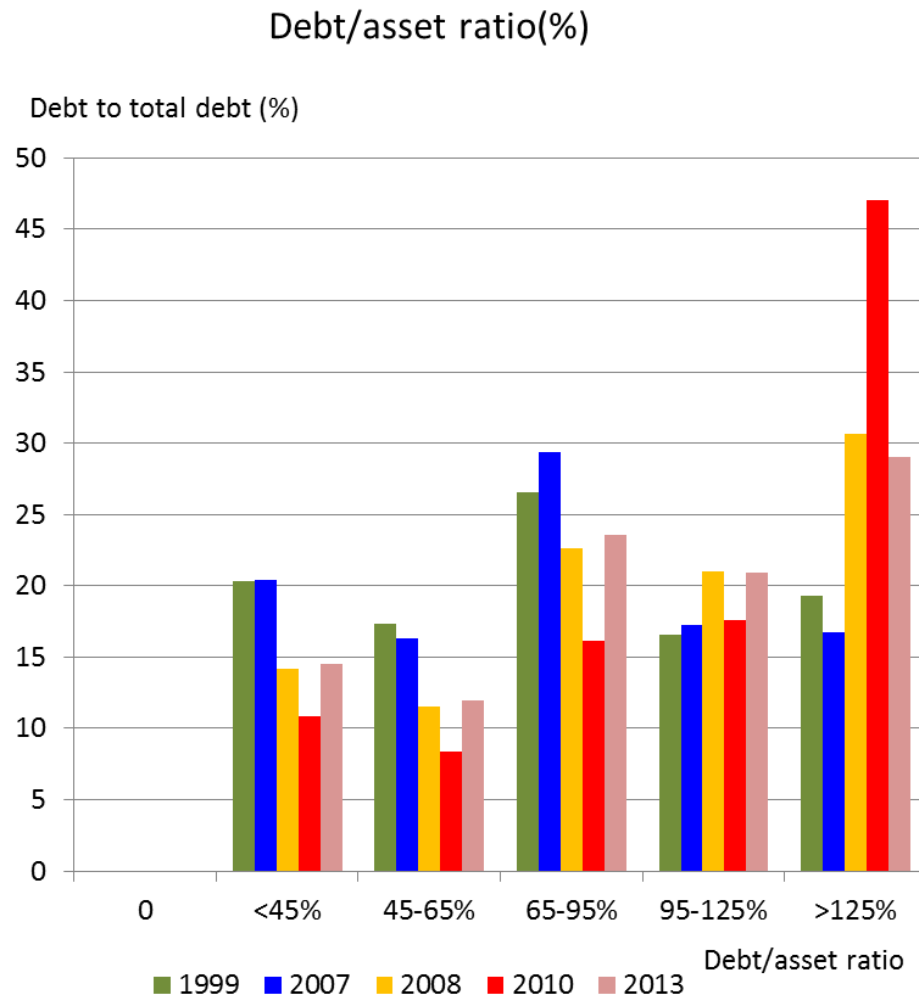
- Deleveraging and use of micro data-

Outlook and further analyses

Bubble burst and consequences



- From peak-to-trough:
 - ISK depreciation 60%
 - inflation peaked at close to 20%
 - real wages declined by 13½%
 - unemployment rose by 8½ pp.
 - real house prices fell by 1/3
 - stock prices collapsed and financial income decreased by 81%
 - CB interest rates peaked at 18%
- As expected, households' financial position deteriorated considerably
 - Number of debtors that owed more than 95% of their assets doubled from about 18% prior to the crises to 35% in 2010

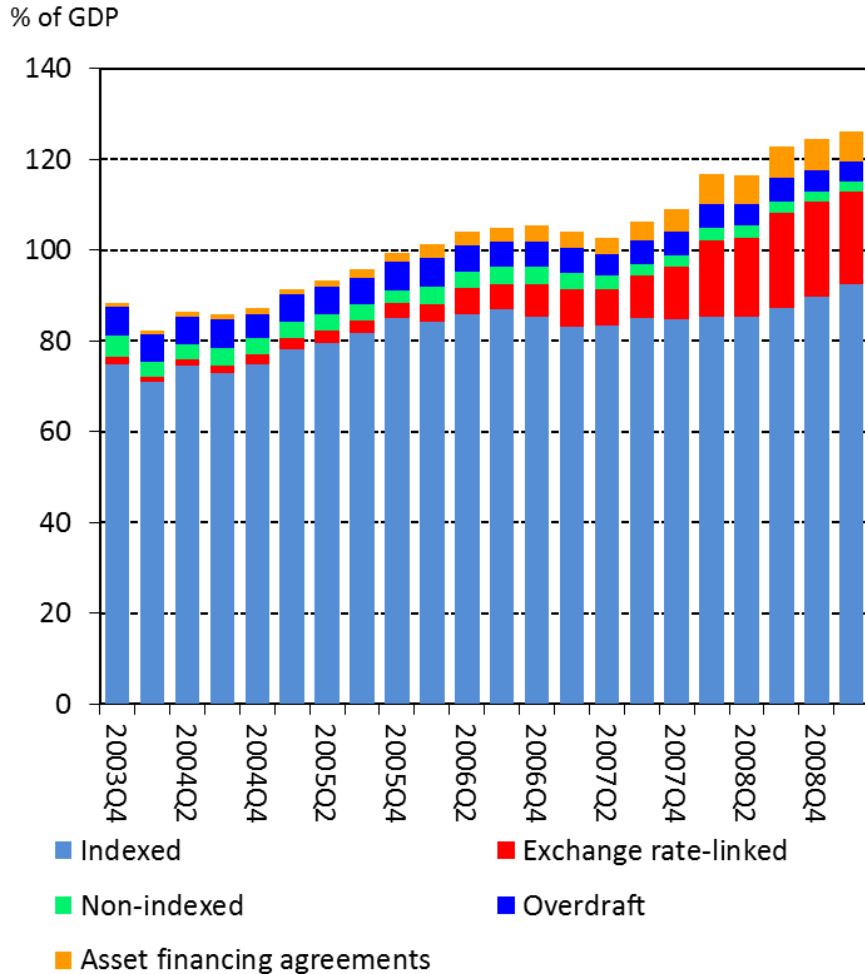


Sources: Statistics Iceland, Central Bank of Iceland.

Increase in household debt and higher LTV



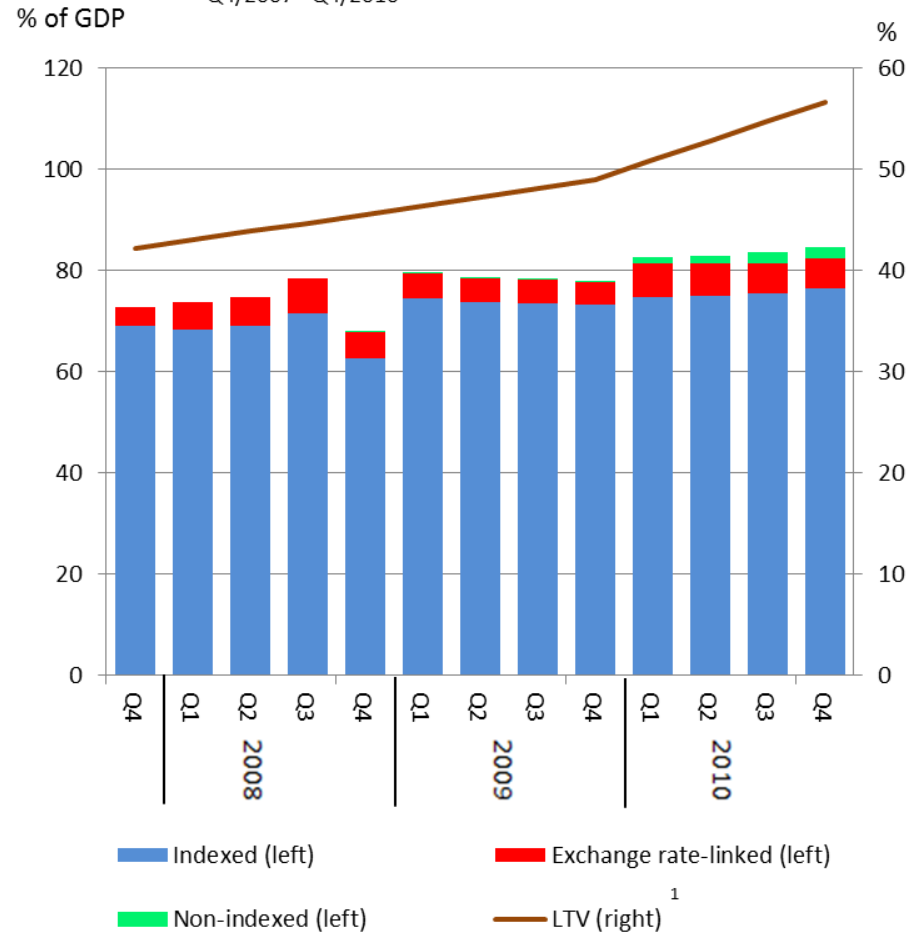
Household debt as % of GDP
Q4/2003 - Q1/2009



Source: Statistics Iceland, Central Bank of Iceland.

Household mortgage debt as % of GDP and LTV

Q4/2007 - Q4/2010



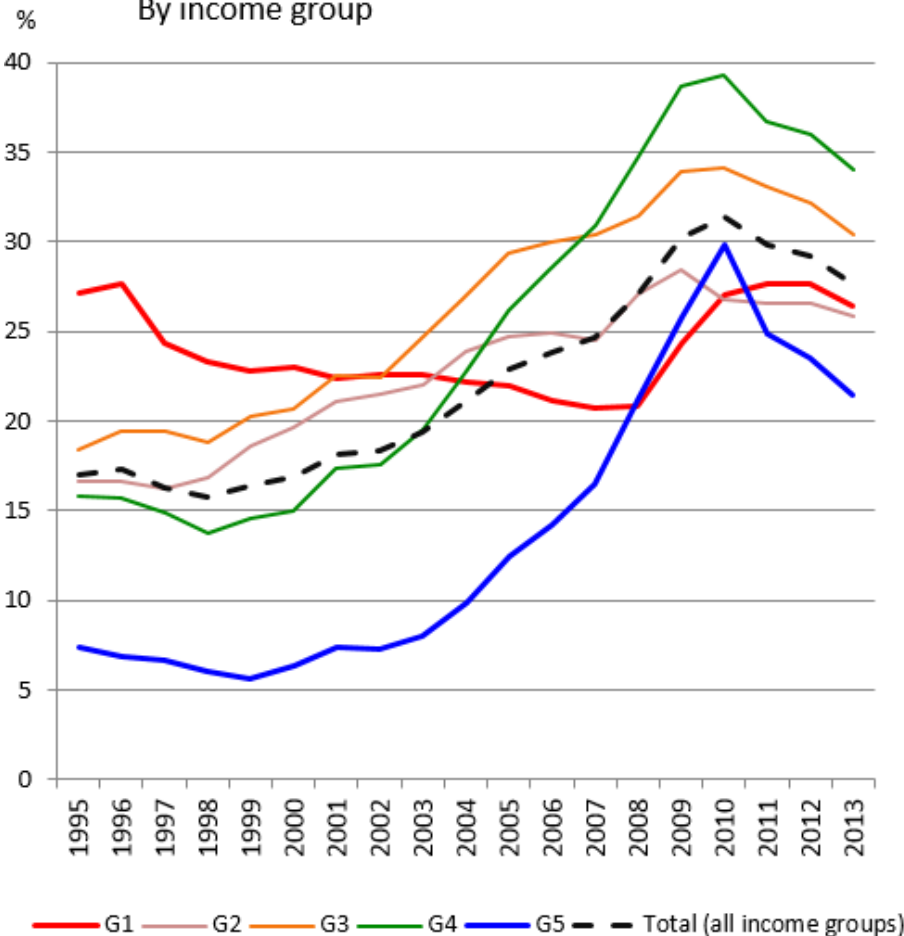
1. Household mortgage debt as % of total assets of households in real estate.

Source: Statistics Iceland, Central Bank of Iceland.

Servicing of debt became difficult

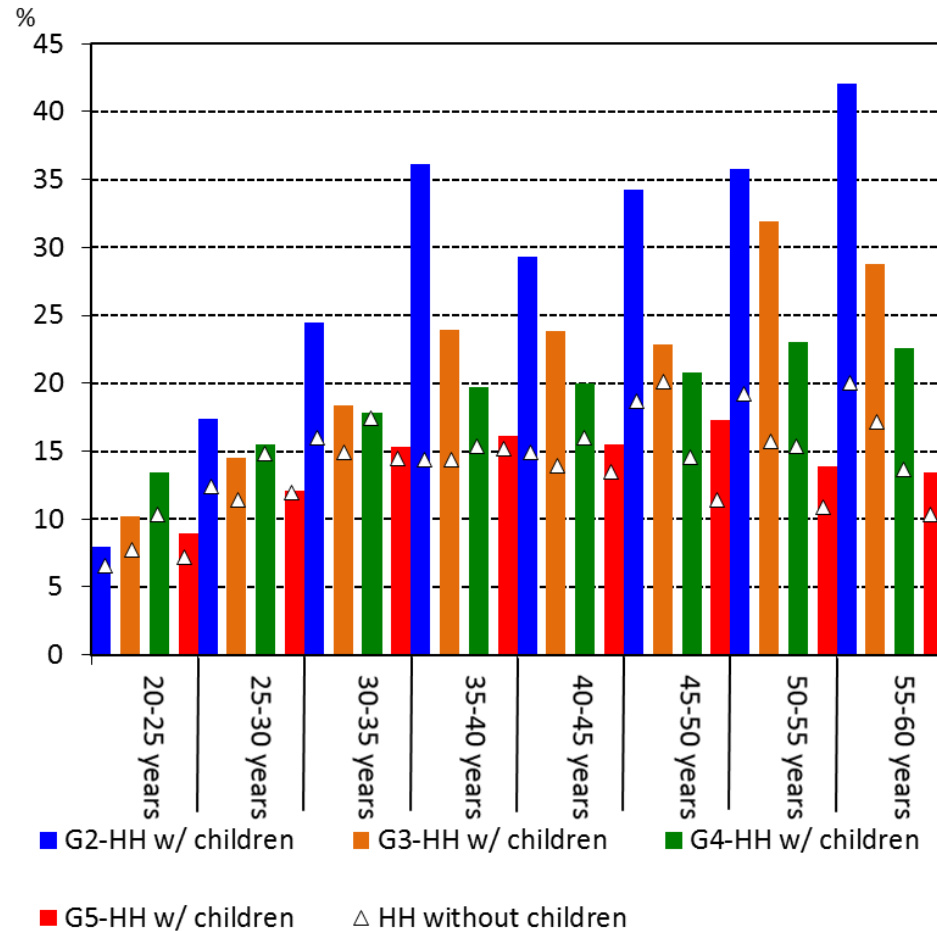


% of taxpayers owing more than 300% of disposable income
By income group



Source: Statistics Iceland.

Debt burden by income, age and family structure¹
Year 2009



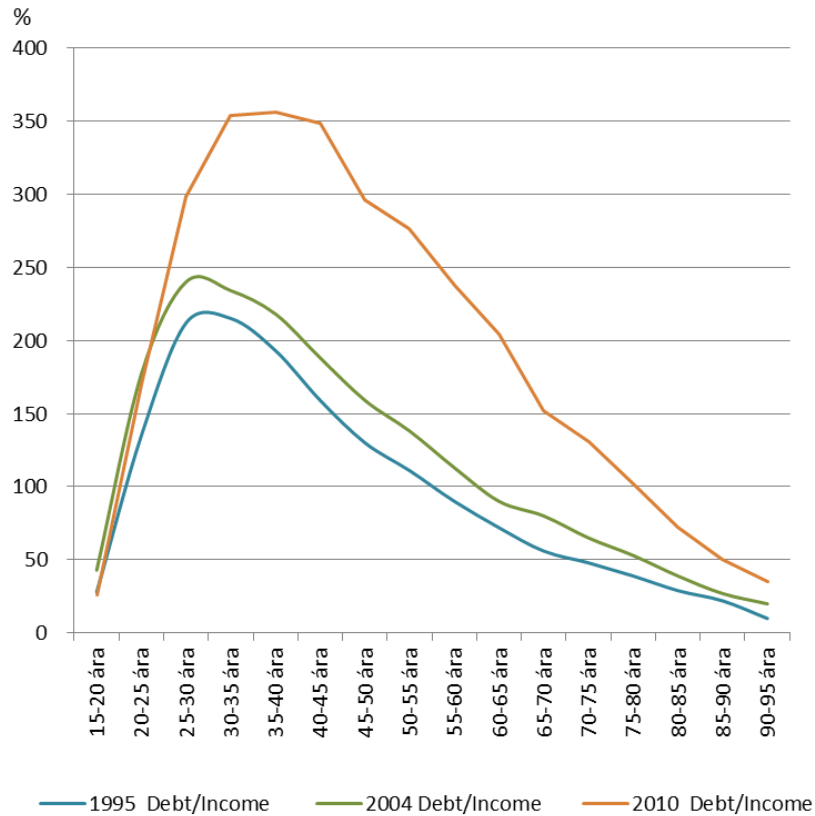
1. Net interest payments as share of after tax income. First income group G1 not shown.

Source: Statistics Iceland.

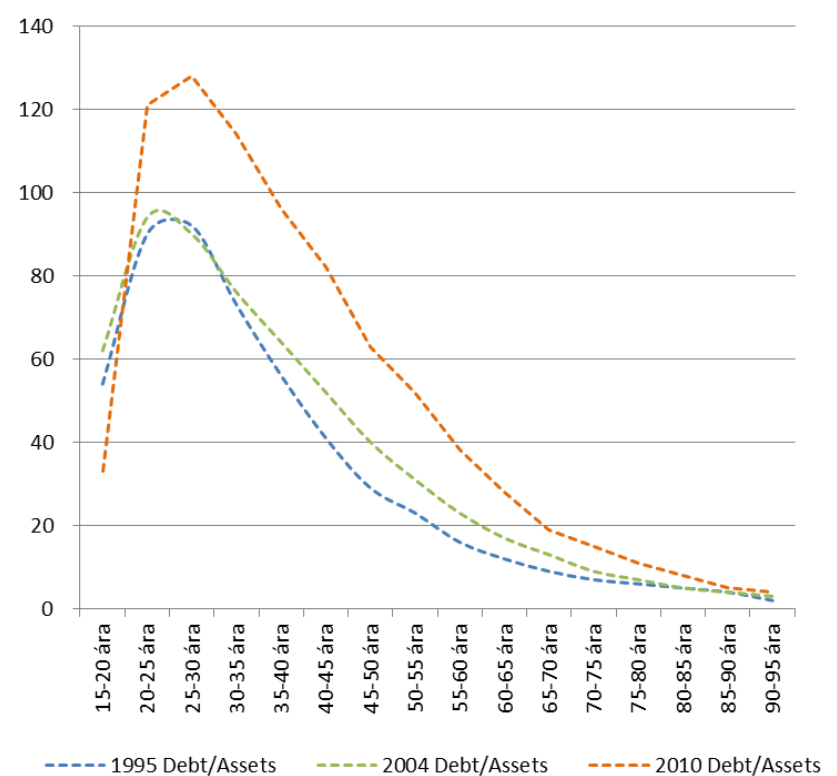
Evolution of debt ratios by age



Debt as percentage of income
by age of debtor 1995, 2004, 2010



Debt as percentage of Assets
by age of debtor 1995, 2004, 2010



1. All income groups.

Source: Statistics Iceland, Central Bank of Iceland.

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Source: Statistics Iceland, Central Bank of Iceland.

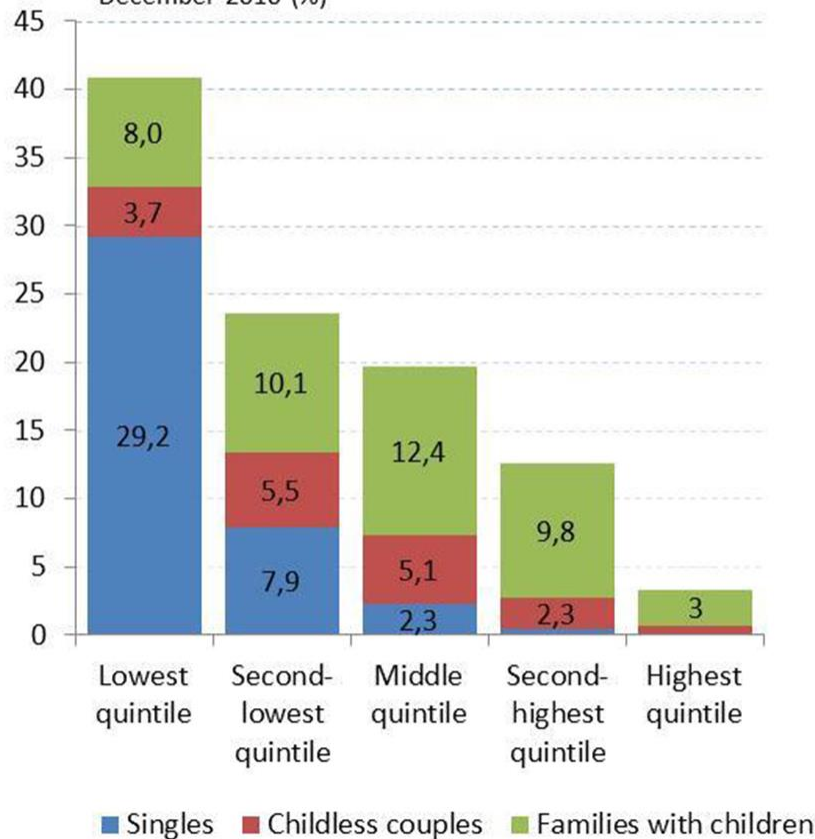
Composition of distress



5.3a

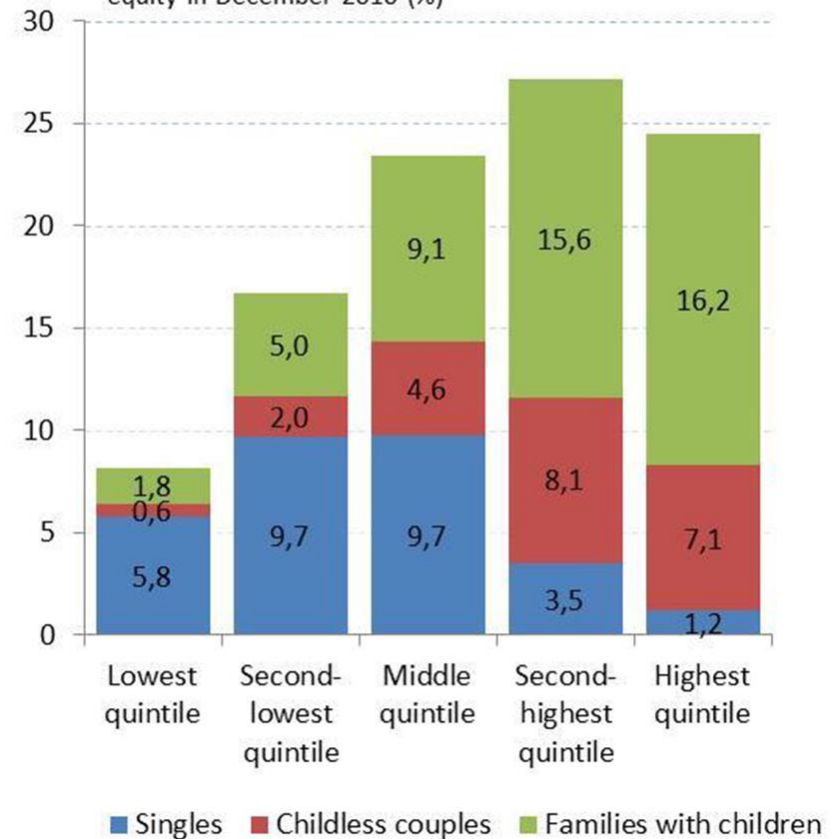
Composition of households in financial distress in December 2010 by income and family type¹

Share of indebted households in financial distress in December 2010 (%)



Composition of homeowners in negative housing equity in December 2010 by income and family type¹

Share of indebted households in negative housing equity in December 2010 (%)



Source: Central Bank of Iceland Household Sector Database.

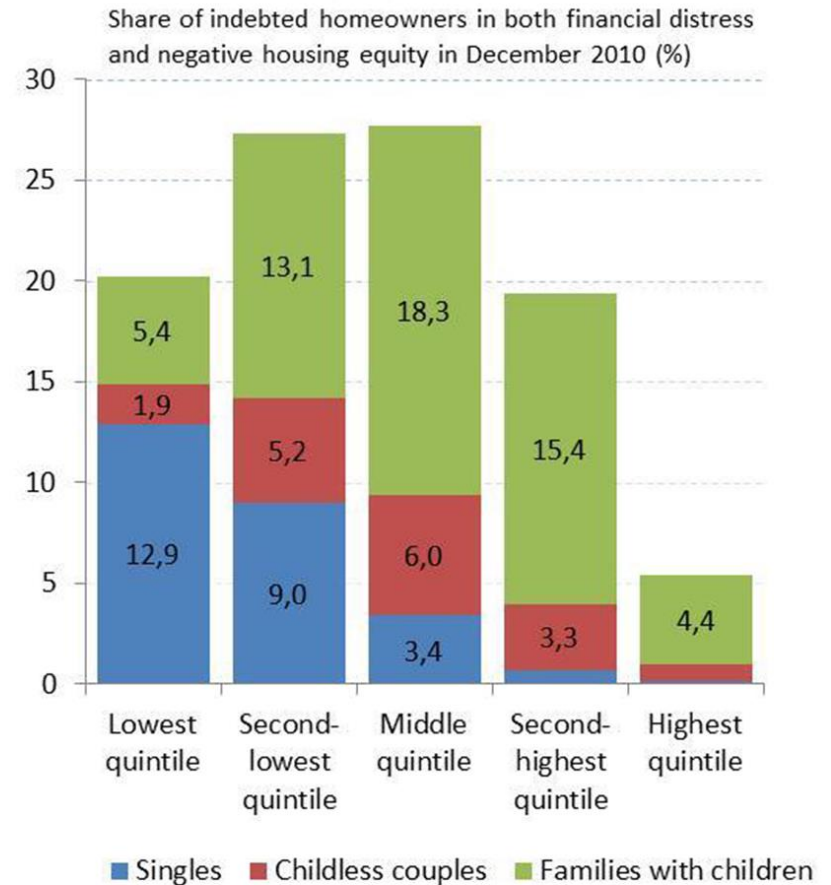
Source: Central Bank of Iceland Household Sector Database.

Composition of distress⁽¹⁾



- So is there a overlap between those in financial distress and negative housing equity
 - Middle income families with children.

Composition of homeowners in financial distress and negative housing equity by income and family type¹



(1) Households' position in the financial crisis in Iceland by Thorvardur Tjörvi Ólafsson and Karen Áslaug Vignisdóttir June 2012

<http://www.cb.is/library/Skráarsafn---EN/Working-Papers/Working%20Paper%2059.pdf>

Source: Central Bank of Iceland Household Sector Database.

Policy measures



- A mix of measures have been introduced. The aim has been to maximize the impact with moral hazard in mind
- Some measures have been non-policy controlled delivered through the court system

General measures

Payment rescheduling

Changes to benefit schemes

3rd pillar pension fund pay-outs

110% option

De-centralized m.

Bank-administered out-of-court voluntary debt restructuring

Ombudsman-administered debt restructuring

Currency indexed loans judged illegal

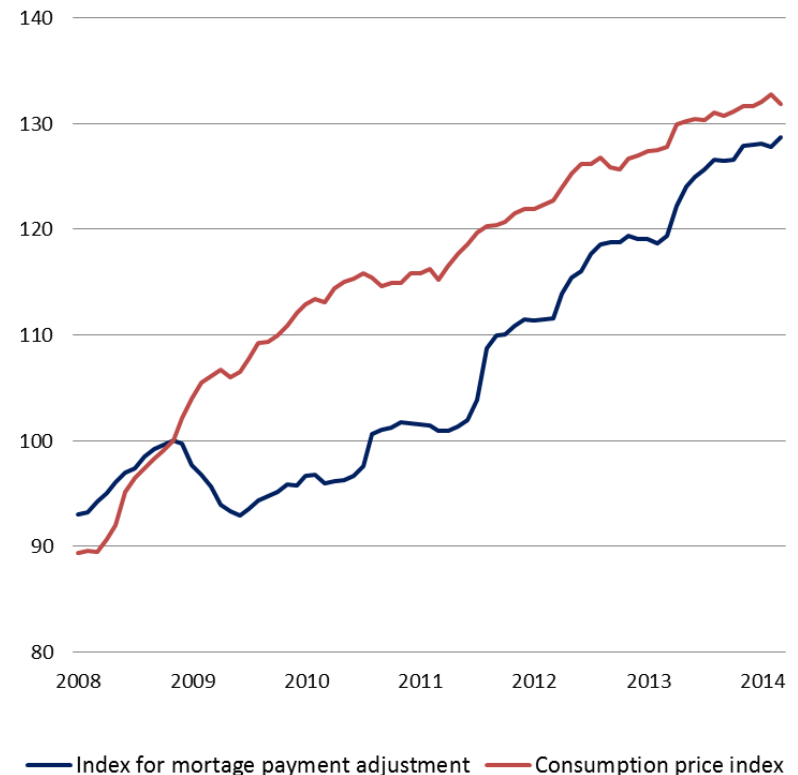
Special Government's household mortgage relief measures

Policy measures

- Extensions of loan maturities: A act was passed in 2008 to decrease mortgage payments of indexed housing mortgages for individuals,
 - In 2008, 70% of all loans to households were indexed
 - Payment scheme of more than half of indexed loans were changed
 - Difference in monthly payments maximized in 16% midyear 2010 but only 2% now
- Child transfer payments were increased
- Interest rebate
 - Standard Interest rebate increased by more than 60% between 2007 and 2011
 - Special additional interest rebate, close to 1% of mortgages, for indebted households. Independent on income.
 - Financed by a tax levied on financial institutions



Index for mortgage payment adjustment
january 2008 - march 2014

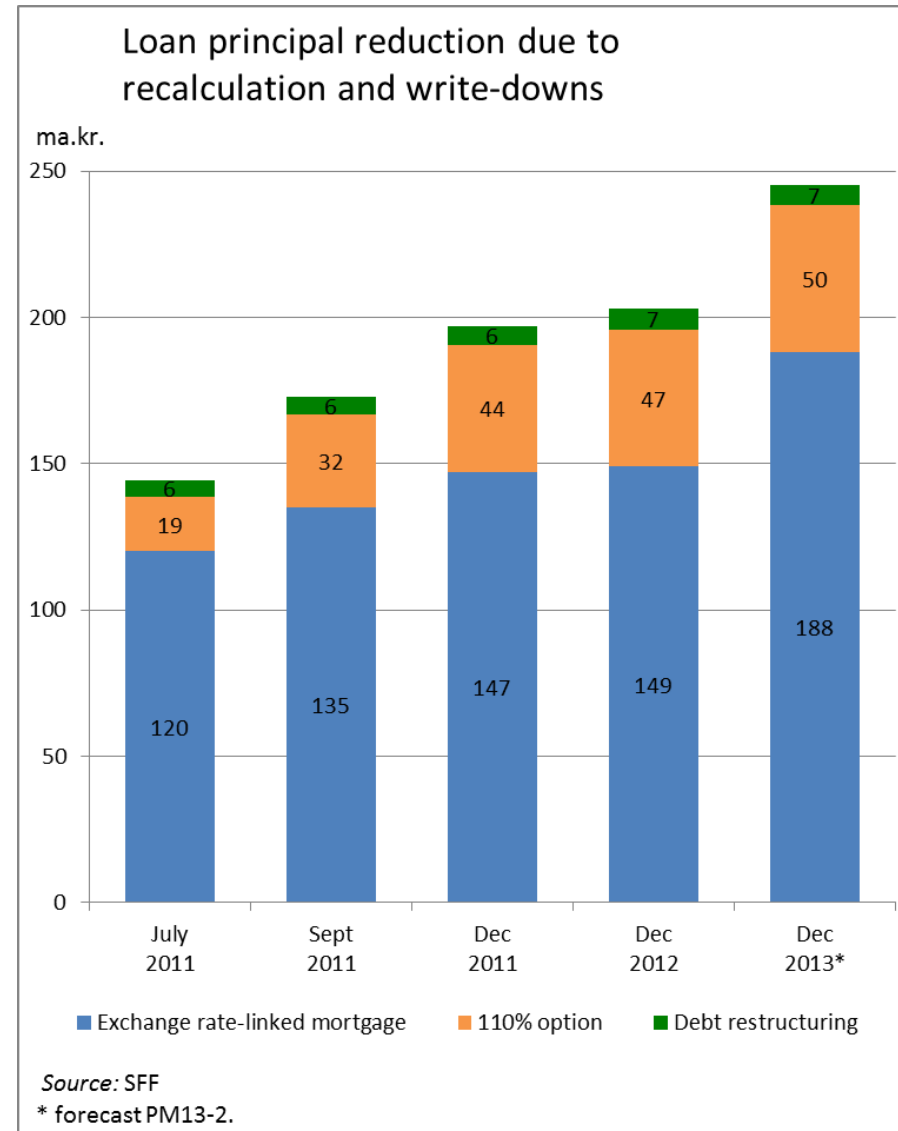


Source: Statistics Iceland.

Policy measures and court case outcomes



- Currency indexed loans deemed illegal
 - Loan principal decreases by more than 50%
 - Total write-offs, 11% of GDP
- The 110% option
 - For households with mortgages exceeding 110% of their underlying property value
 - Total write-offs, 3% of GDP
- Debt ombudsman
- **TOTAL loan principal reduction about 250 b.ISK or about 15% of GDP**

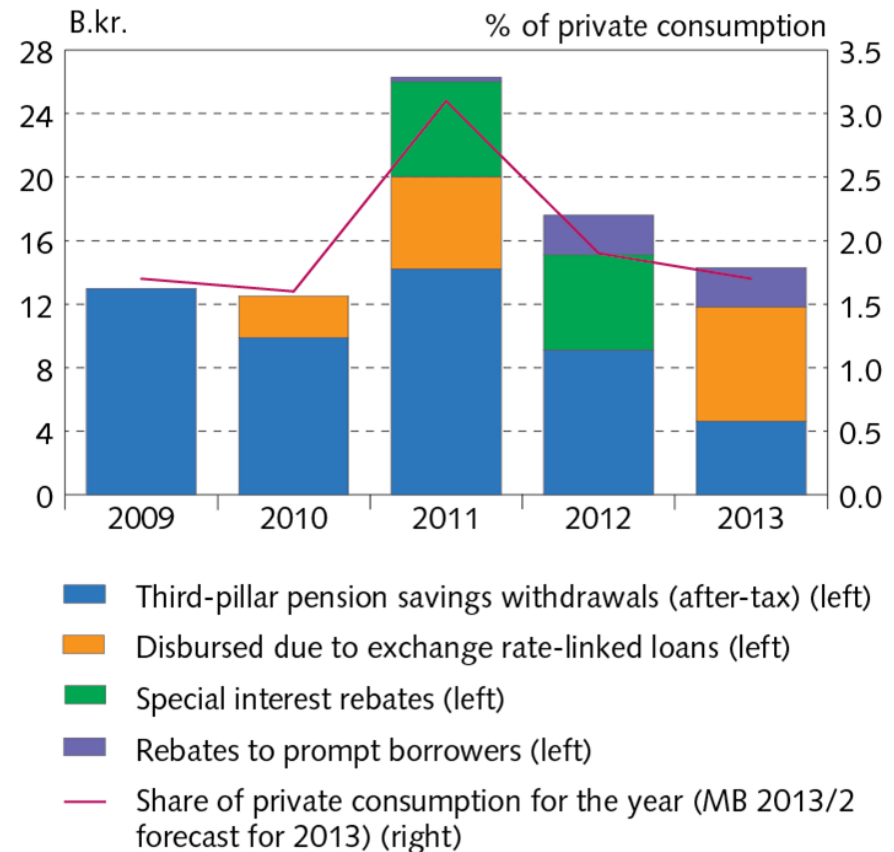


Policy measure



- Third Pillar pension savings withdrawals
 - Totalling about 103 b.ISK or about 6% of GDP
 - About 4% of GDP after tax
 - Less than 3% of the pension saving system
 - Increased disposable income by 2% first years after crisis
 - Did not strain public sector finances – generated income

Special post-crisis disbursements to households



Sources: Statistics Iceland, Central Bank of Iceland.

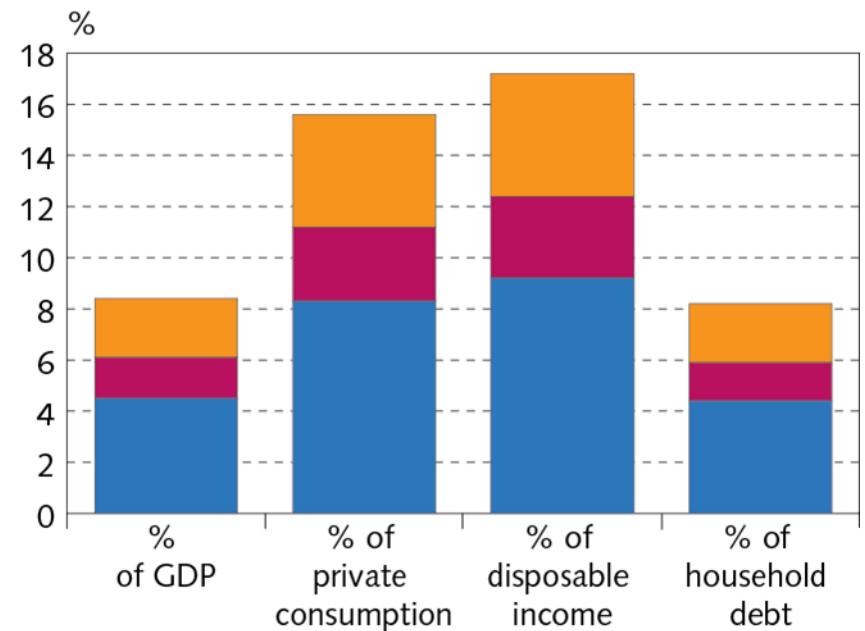
Government's household mortgage relief measures



- Direct reduction of indexed mortgage principal
 - financed with an asset tax on financial institutions
- Reduction of indexed mortgage debt with third-pillar pension savings
 - pension savings paid direct to mortgages are tax free

Scope of debt relief measures

Percentage of estimated economic variables 2013



- Government-funded reduction
- Reduction from third-pillar pension savings-related tax concession
- Reduction from borrower's own third-pillar savings

Sources: Prime Minister's Office (2013), Central Bank of Iceland.

1. Direct reduction of indexed mortgage principal

- Inflation-indexation exceeding 4% in the years 2008-2009 adjusted
- Corresponds to a reduction of roughly 13% of indexed mortgage principal
- Maximum amount of 4 m.ISK or €27.000
- Former debt relief measures will be deducted from the proposed debt reduction
- Principal of indexed loans will go down by 72b.ISK (480 m.EUR) from Dec. 2014 to Jan. 2016 or about 4% of GDP
- Servicing of the loans will decline on the spot

2. Reduction of indexed mortgage debt with third-pillar pension savings and tax incentives

- Households will have the opportunity to reduce their mortgage principal using payments that would otherwise be allocated to third-pillar pension savings
 - Tax free, hence a tax incentive and future tax income loss
 - Maximum of 750.000 ISK (5.000 EUR) pr. year for three years.
 - Original scope of this estimated to be 70.000 B.ISK or €450.000, but will probably be less since fewer individuals applied
 - The Treasury's share, through the tax concessions, is 40%

Economic impact



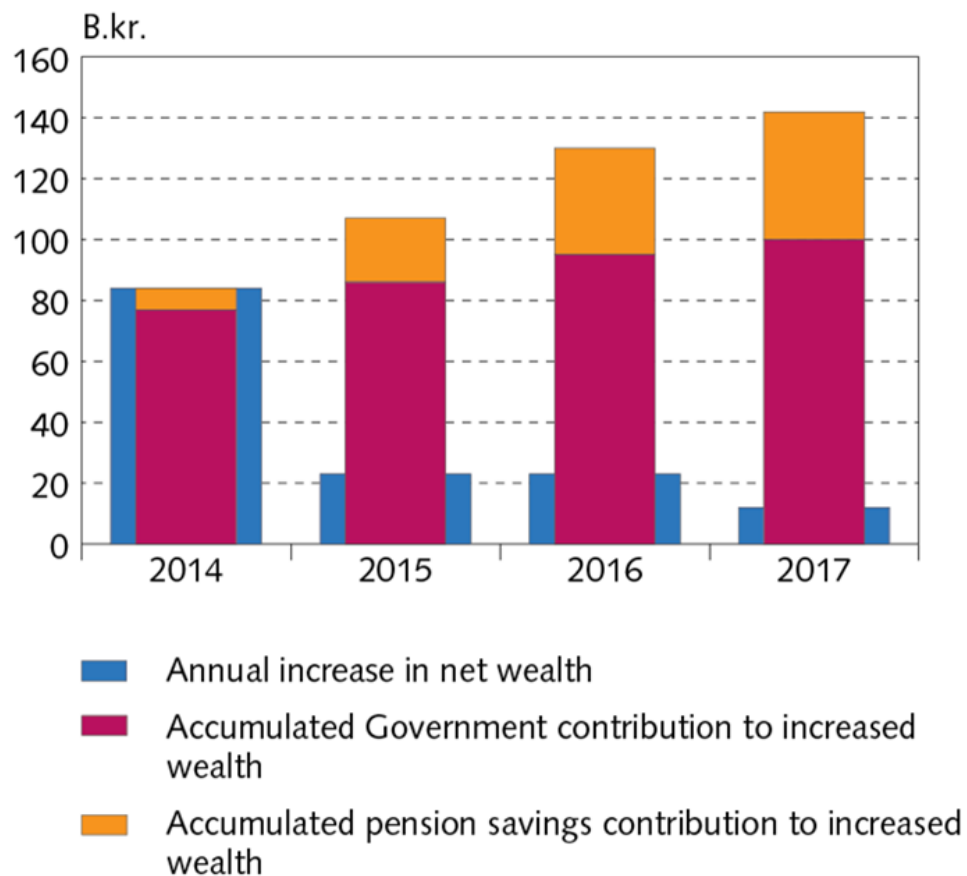
- **Wealth effect**

- Net assets eligible as loan collateral will increase by a total of 142 b.ISK
- This could increase private consumption permanently by nearly 7 b.kr., or 0.7% of GDP
- Initial effects stronger

- **Income effect**

- Debt servicing will decline 10b.ISK pr. year when maximized.
- DI will increase max 1% of GDP.

Household debt reduction



Sources: Prime Minister's Office, (2013), Central Bank of Iceland.

Where are we now

- Household debt as share of GDP

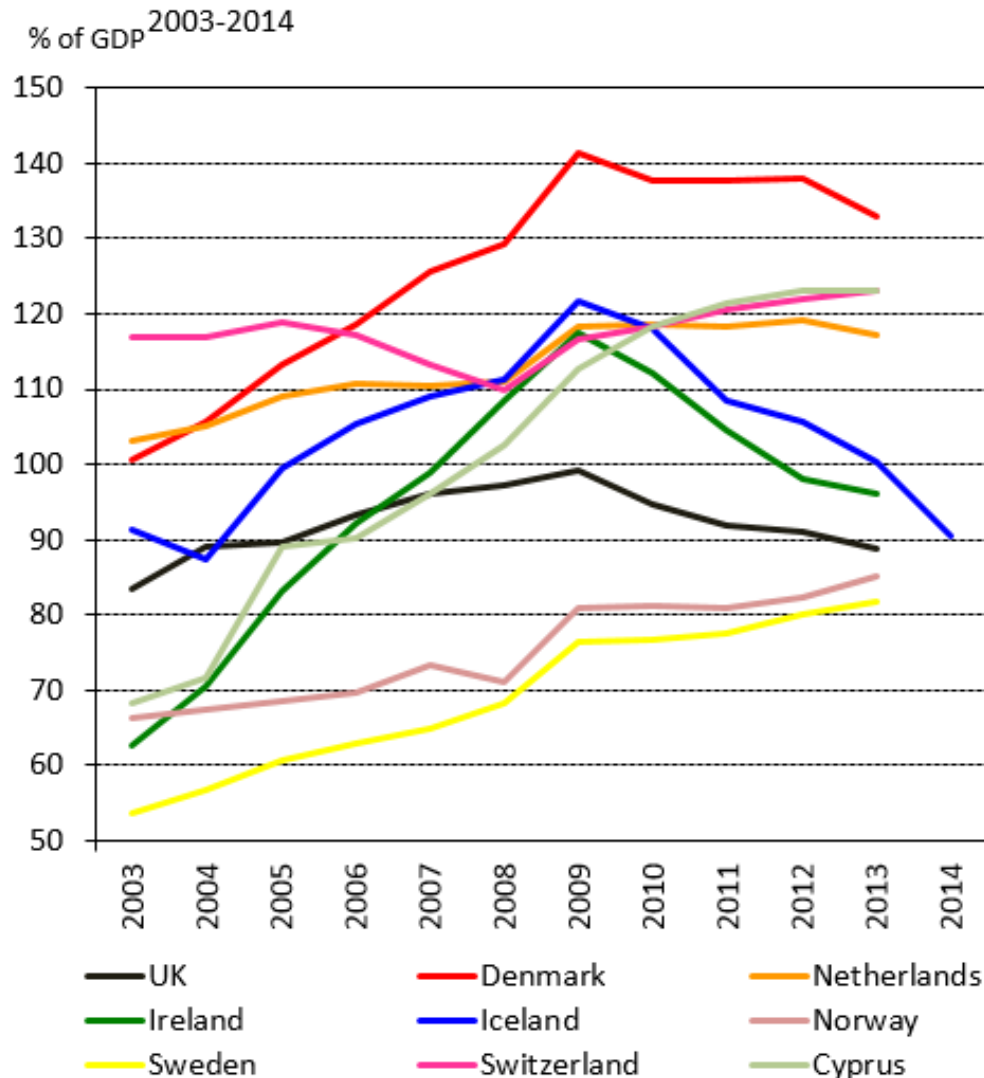
- Estimated to be 90.5% at the end of year 2014
- Peaked at 126.2 % of GDP in Q1 2009 and has therefore decreased by almost 36% of GDP in last 6 years

- Households sentiment towards debt and leverage has changed

- Households not as willing to take on debt
- Many households pay extra on their mortgage
- HH debt stock will probably continue to decrease compared to GDP next years



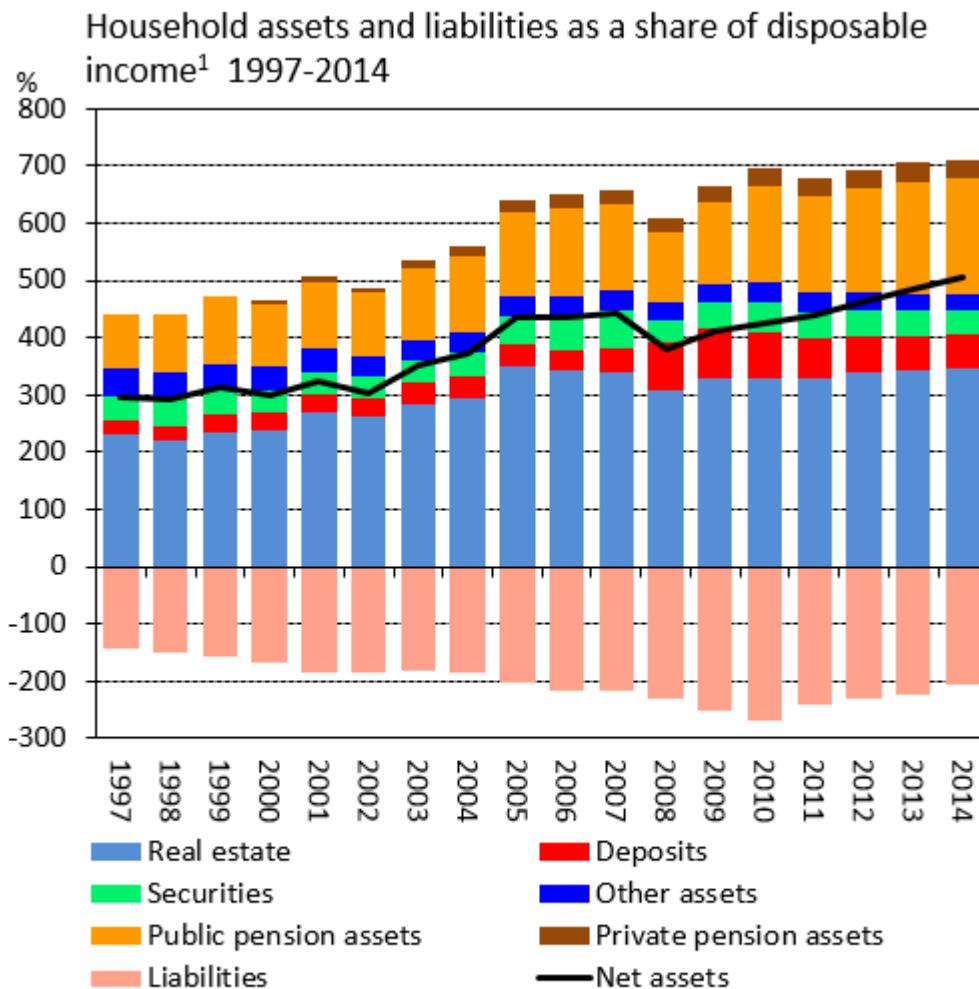
Household debt by European comparison



Sources: Eurostat, Statistics Iceland, Central Bank of Iceland.

Assets and debt as share of disposable income

- Net assets
 - 505% of disposable income
 - Never been higher
- Debt
 - Estimated to be 207% of d.i. at the end of 2014
 - Peaked at 270% of d.i. in 2010
 - LTV 44.5% in year end 2014, down from 56% in 2010
- Pension assets
 - Total pension assets estimated to be 155% of GDP at year end 2014



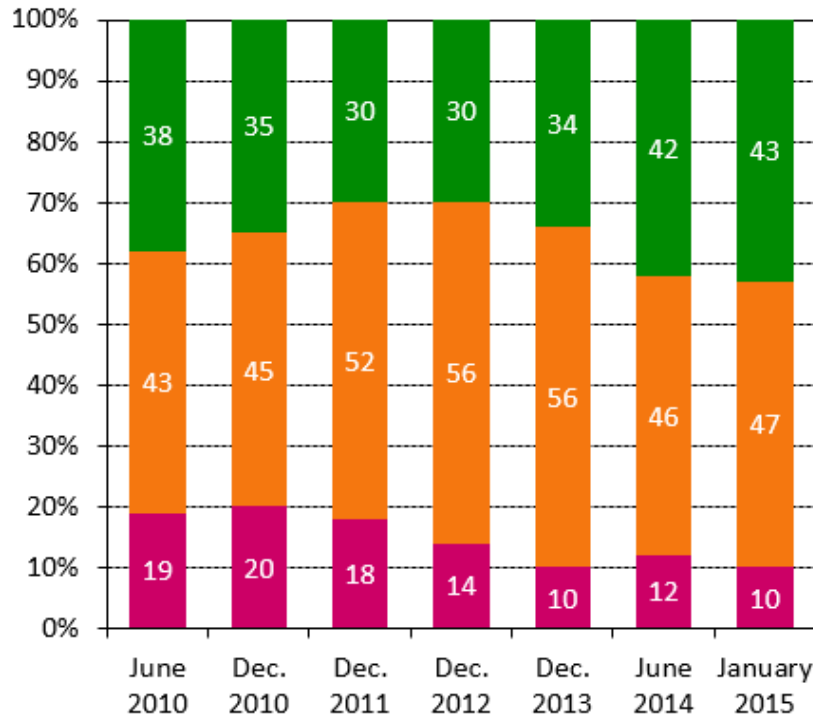
1. Pension fund assets are based on payouts after deduction of 30% income tax.

Sources: Statistics Iceland, Central Bank of Iceland.

Non performing loans



Status of loans to households from three largest banks and Housing Financing Fund¹



■ Performing w/o restructuring

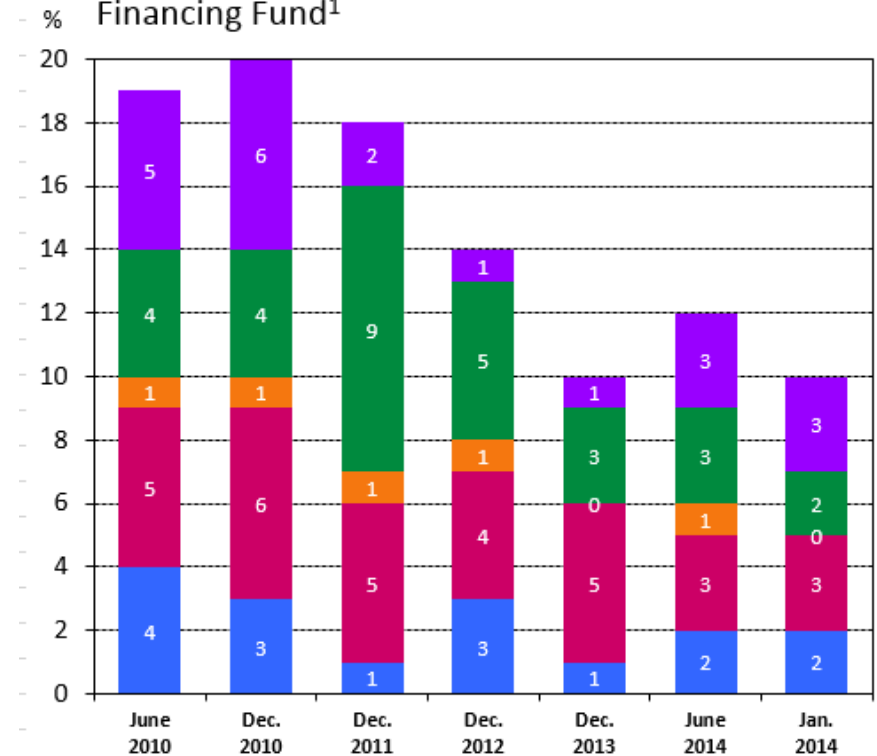
■ Performing after restructuring

■ Non-performing loans; loans to customers with at least one loan in default for over 90 days, 2) frozen or deemed unlikely to be paid²

1. Parent companies, book value. 2. Non-performing loans are defined as loans in default for over 90 days, frozen or deemed unlikely to be paid. The cross-default method is used; i.e., if one loan taken by a customer is non-performing, all of that customer's loans are considered non-performing.

Source: Financial Supervisory Authority.

Status of household non-performing loans from the large commercial banks and the Housing Financing Fund¹



■ In enforcement proceedings²

■ In collections

■ In restructuring

■ Other non-fulfilment

■ Frozen

1. Parent companies, book value. Non-performing loans are defined as loans in default for over 90 days, frozen or deemed unlikely to be paid. The cross-default method is used; i.e., if one loan taken by a customer is non-performing, all of that customer's loans are considered non-performing. 2. The share of loans in enforcement proceedings and collections declined in December 2011 because the HFF did not send out dunning letters or forced sale requests in the latter half of the month.

Source: Financial Supervisory Authority.

Assets and debt by age group

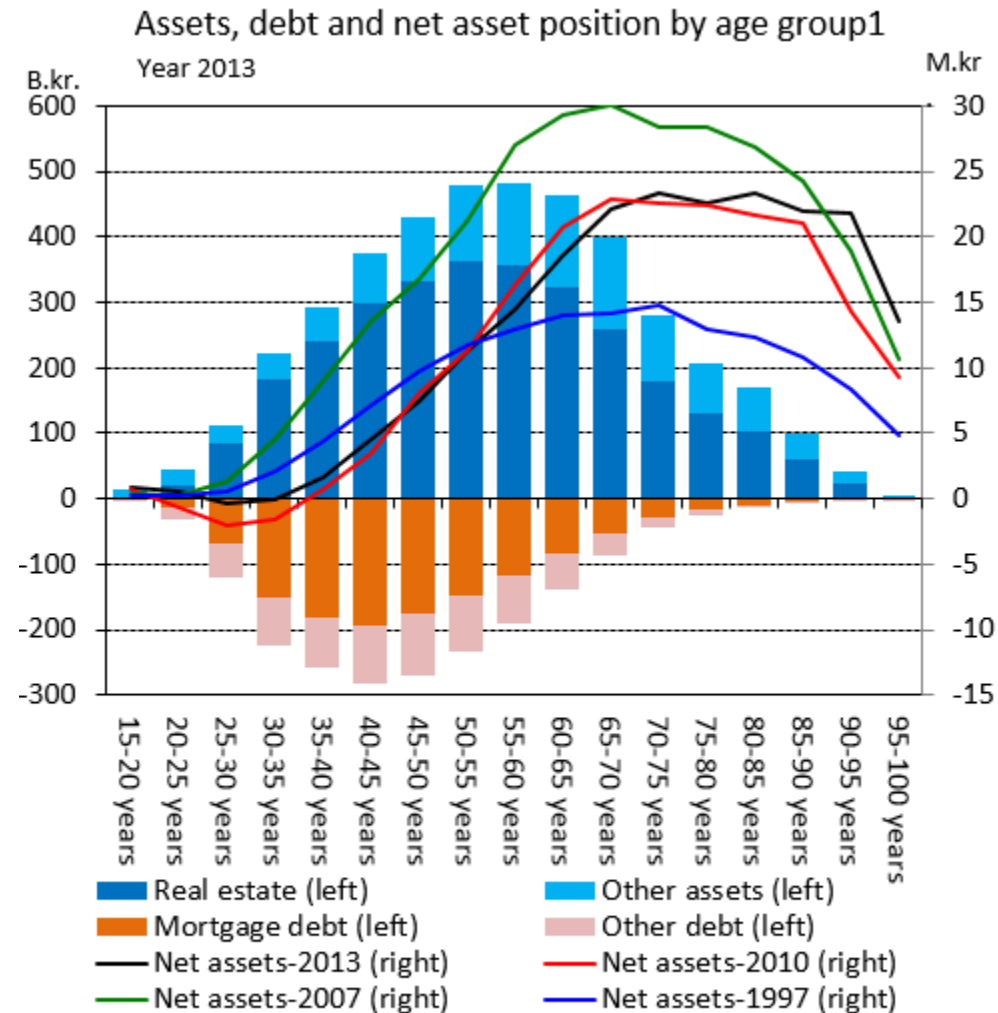


- Young households

- Housing wealth accounts for grater share of total wealth
- More sensitive since, a) they have lesser financial wealth to meet shocks and b) movements in house prices affects net wealth highly

- Net assets

- Age group 20-35 years had negative net asset position in year 2010 but age group 25-35 years in 2013
- Households with negative position in real estate
2007=7,600
2010=25,300
2013=16,000



1. Left axis shows total assets and debt of each age group in 2013 and right axis shows net asset position in 2013 price levels.

Sources: Statistics Iceland, Central Bank of Iceland.

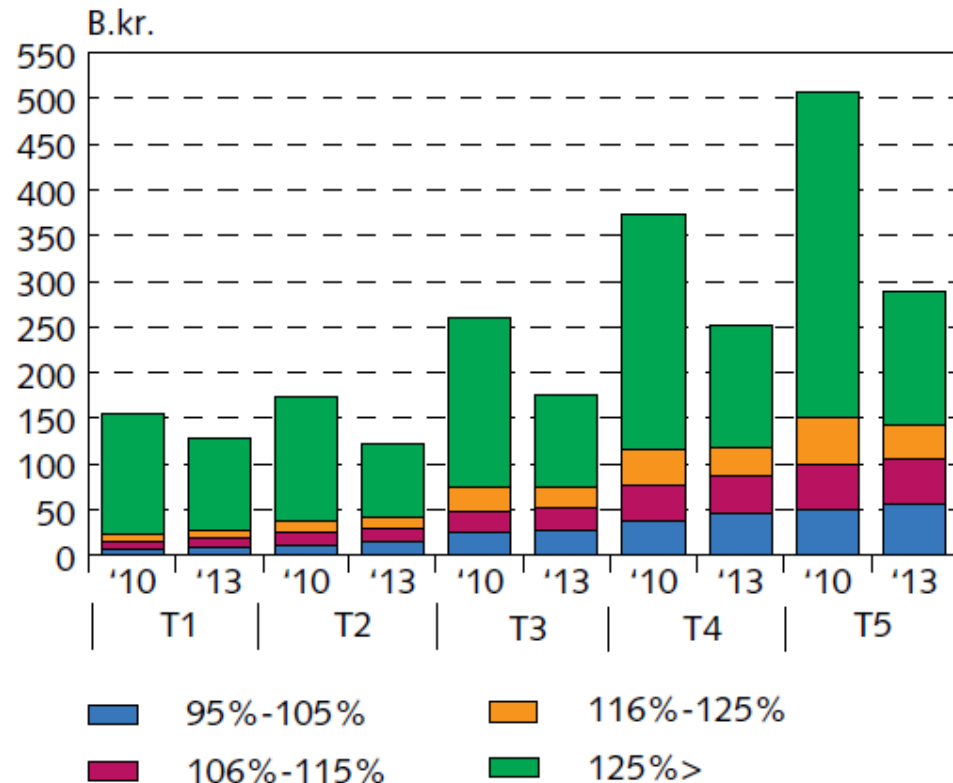
Households in high indebtedness



- Debt problems have subsided
 - At year-end 2013 30.0% of households owed 95% or more of the value of their assets, as opposed to 35.3% in 2010
 - The position of the most-leveraged group has improved dramatically since bottoming out 2010
 - Households with negative equity owed 50% of total household debt, at year-end 2013 as opposed to 65% in 2010

Debt ratio of individuals owing more than 95% of assets¹

2013 price level



1. As of year-end 2010 and 2013, by income group. The chart shows the distribution of households owing more than 95% of assets by period and income group.

Sources: Statistics Iceland, Central Bank of Iceland.

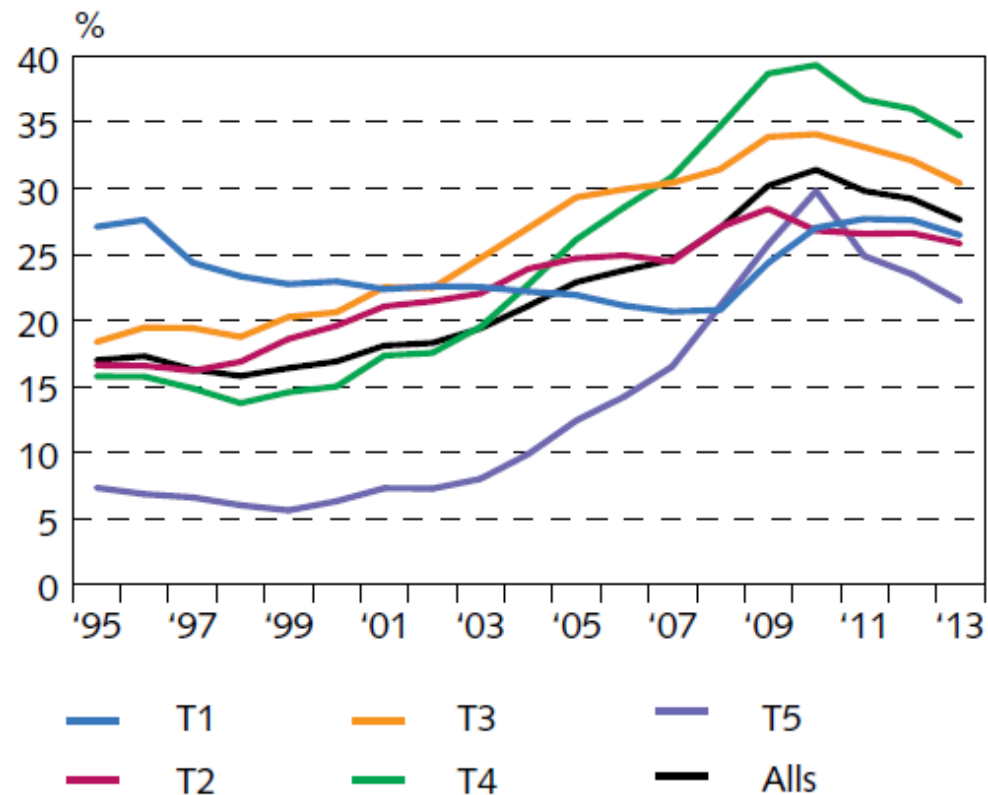
Tax filers who owe more than three times their annual disposable income



- Number individuals who owe three times their annual income continues to decline
 - At year-end 2013 27.6% of individuals owed more than 3 times disposable income, opposed to 31.4% in 2010
 - Second highest income group with the greatest debt level
 - Since year 2010 the improvement in debt level has proportionally been greater in higher income groups

% of taxpayers owing more than 300% of disposable income

By income group

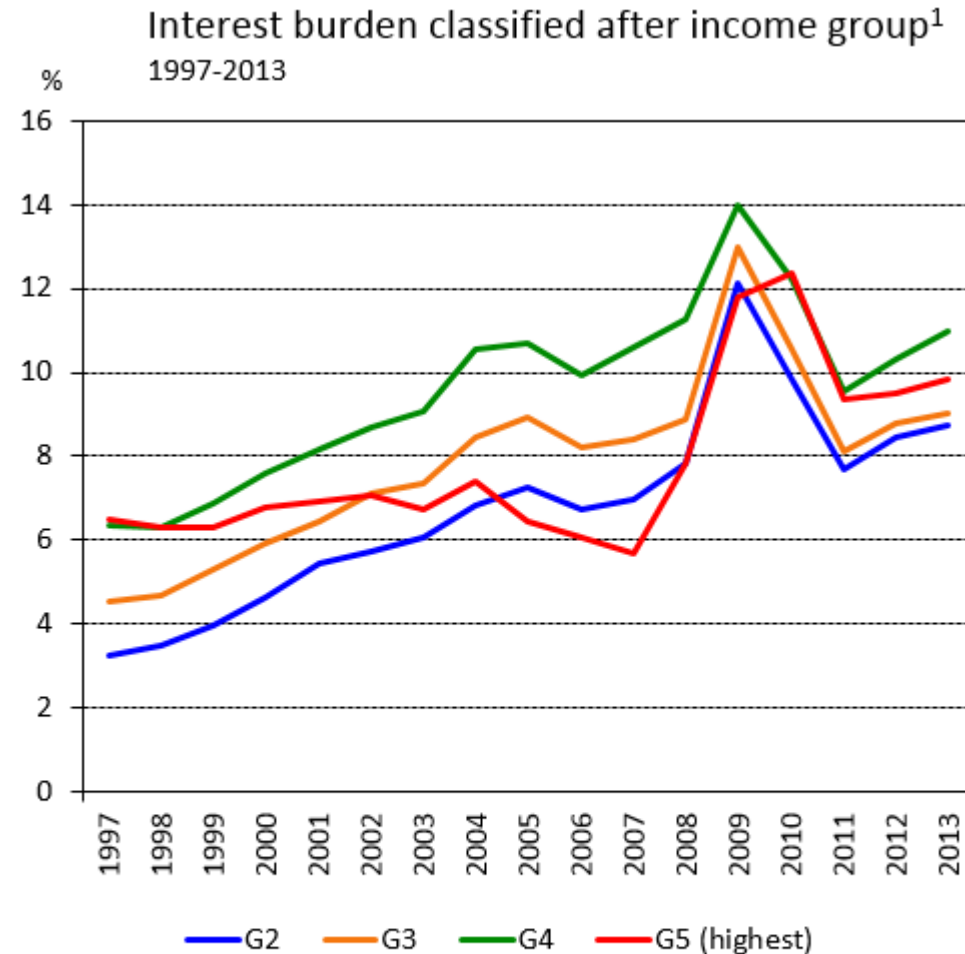


Sources: Statistics Iceland, Central Bank of Iceland.

Interest burden by income group



- Interest burden, i.e. net interest payments as share of disposable income, has been on the rise since 1997
- Sharp increase in interest burden in 2008-2009
- Interest burden has decreased since then
- Overall, the lowest income group with the lowest interest burden



1. Net interest payments as share of after tax income (interest subsidies have been considered). The lowest income group G1 is not shown.

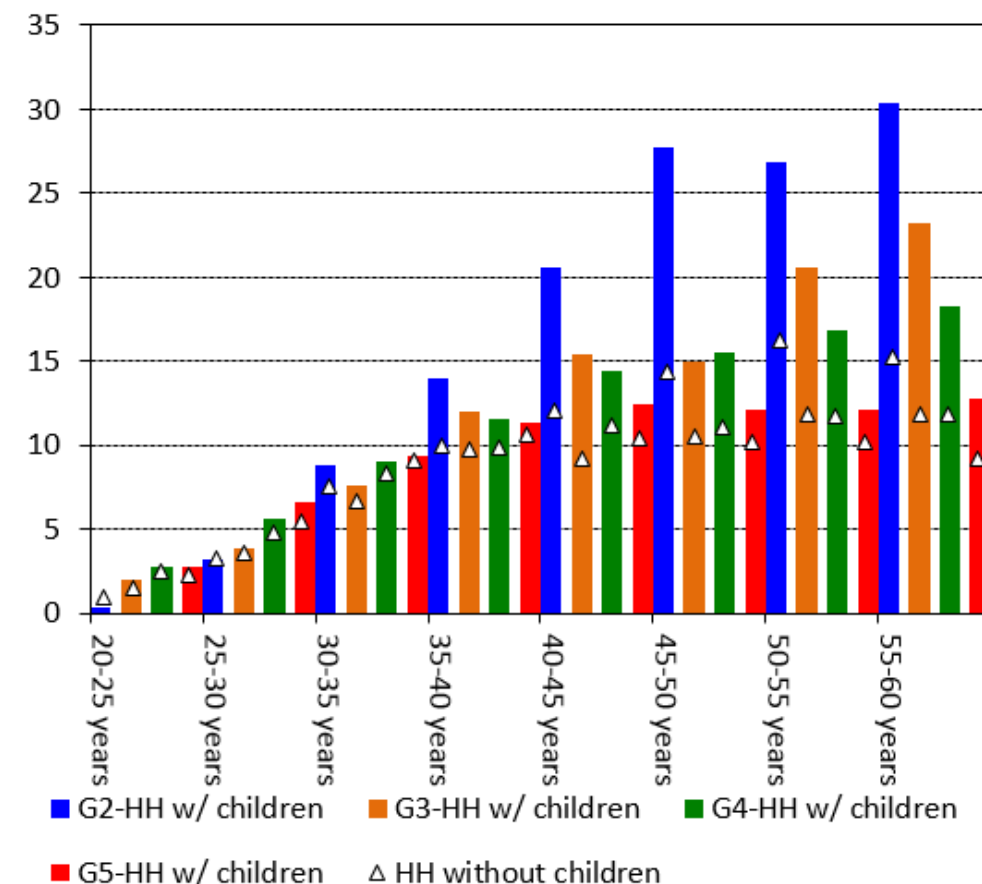
Sources: Statistics Iceland, Central Bank of Iceland.

Interest burden by income, age and family structure



- Households with children in the age group 45-60 years and low income with the highest interest burden, between 25-30% of disposable income
- The situation has improved since 2009 when interest burden, was between 35-40%
- Highest income group with the lowest debt burden even though largest part of households debt belong to that income group.

Interest burden classified after income, age group and family structure¹ Year 2013



1. Net interest payments as share of after tax income (interest subsidies have been considered). The lowest income group G1 is not shown.

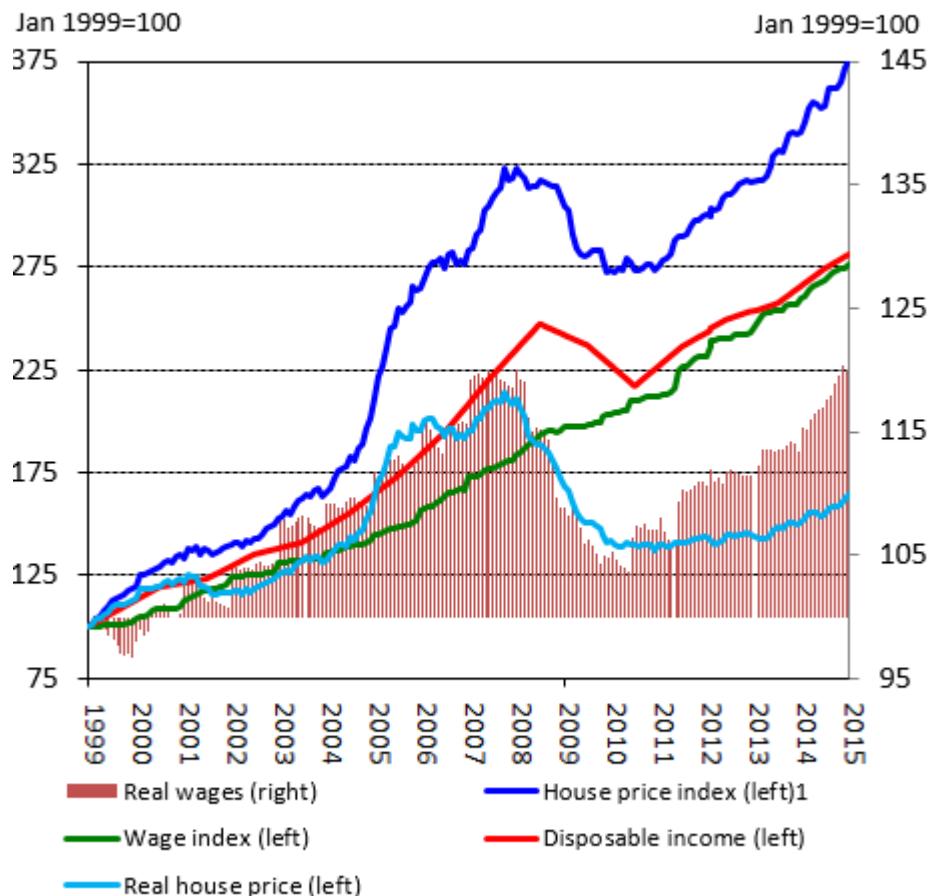
Sources: Statistics Iceland, Central Bank of Iceland.

House prices and wages



- Disposable income grew faster than wages before crisis as financial income was considerable. Financial income crashed in 2008.
- Real wages hit the bottom in 2010 and have increased considerably since then. In fact have never been higher.
- Real house prices peaked in October 2007 (214 index value) and have to increase by 30% in real terms to match the highest value.

Greater Reykjavík real estate prices, wage index and per capita disposable income
January 1999-January 2015



1. Greater Reykjavík house price index.

Sources: Registers Iceland, Statistics Iceland.

Outlook (positive)



- In the newest Monetary bulletin, the Central Banks forecast for year 2015:
 - GDP growth to be 4.2%
 - Trade balance to be 8.6% of GDP
 - Private consumption to increase by 3.7%
 - Unemployment rate to be 4.0%
 - Real disposable income to increase by 6.1%
 - Inflation 0.7% (year-on-year change)

Further household analyses



- After crisis in year 2008 the focus has been on indebtedness, families in distress and restructuring
- The households debt stock has decreased considerably
- The focus now is on those families in most vulnerable position, for example: renters, first time real estate buyers and low income families with children
- Further analyses is needed on households behavior and consumption, to for example better define households margin
- Aim to improve data



THANK YOU