

# Mortgages in Canadian Wealth Portfolios: 1870-1930

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# Introduction

- The late nineteenth and early twentieth centuries saw expansion of the Canadian financial system in terms of asset volumes as well as product differentiation.
- Yet, private mortgage lending remained a major personal investment vehicle.
- Historical probate wealth micro data for Ontario and Manitoba reveal that the real value of mortgages rose over time peaking just before the First World War and then declined.

# Key Results

- The holding of mortgages was positively and significantly related to age, urbanization, high occupational status, and being a widow.
- Mortgages were negatively and significantly related to the share of wealth held in all other financial assets net of mortgages; somewhat negatively related to the growth of bank branches and there was a separate significant negative time trend.
- Mortgages particularly marked the wealth portfolios of the top ten percent of the wealth distribution and a decline in their share of wealth over time also affected mortgage demand.

# Mortgages and Financial Development

- Private mortgages and loans a common feature of pre-twentieth century economic life in Canada and other countries - a feature of more traditional, socially determined systems of resource allocation.
- Canadian financial sector boomed from 1870 to 1930 but private mortgages remained a factor of economic life
  - Redish (2003) Niagara District 1795-1850 - private mortgage lending on same scale as bank lending
  - Baskerville (2006) 1892-1917 - individuals and businesses in Ontario borrowed \$7.6 billion (\$2005) in chattel mortgages.
  - Mortgages were used as a personal investment tool and women in nineteenth century Canada - wills often directed mortgages as investment for widows.
  - A tool for business investment - Brantford. Burley (1994).

# Data

- Established microdata sets
  - Wentworth County, Ontario (1872-1927),
  - Thunder Bay District, Ontario (1885-1931),
  - Ontario (1892, 1902)
  - Manitoba (1875-1927).
  - These data sets vary in size with Ontario 1892 and 1902 consisting of 3,515 and 3,641 individuals; Wentworth County 2,516; Thunder Bay 2,338; Manitoba 826.
- Source: Probate records. 16 inventory categories:
  - 1) Household goods and furniture, (2) Farm implements, (3) Stock in trade, (4) Horses, (5) Cattle, (6) Sheep and Swine, (7) Book Debts and Promissory Notes, (8) **Moneys secured by mortgage**, (9) Life Insurance, (10) Bank stocks and other shares, (11) Securities, (12) Cash on hand, (13) Cash in bank (14) Farm produce, (15) Real estate, (16) Other personal property.

# Summary Statistics

**Table 1: Selected Summary Statistics**

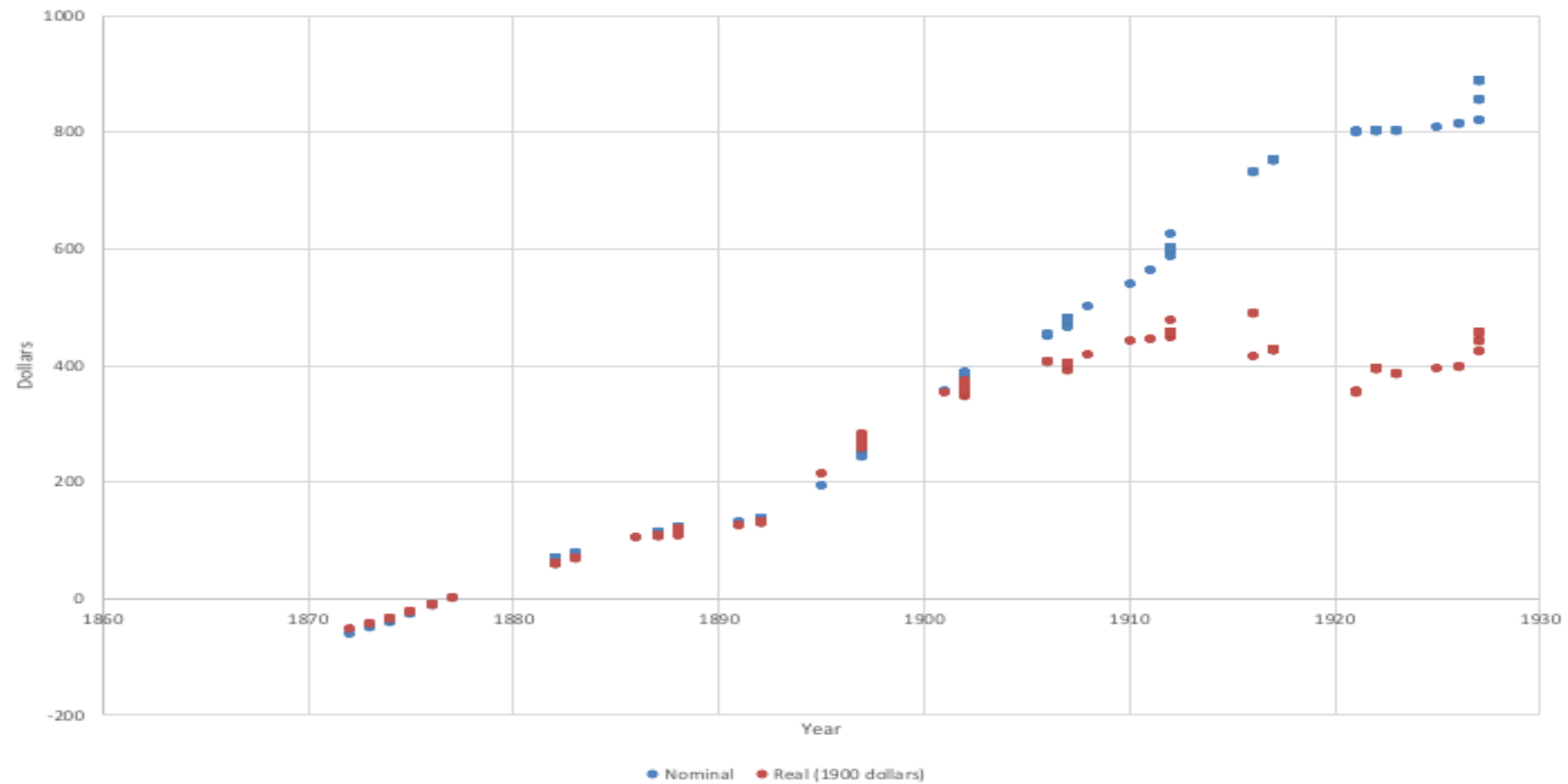
	<b>Manitoba</b>	<b>Thunder Bay District</b>	<b>Wentworth County</b>	<b>Ontario 1892</b>	<b>Ontario 1902</b>
<b>n</b>	826	2338	2516	3515	3641
<b>Average Wealth (\$)</b>	6390	11083	10513	7427	6334
<b>Average Real Estate (\$)</b>	4052	3683	3536	3468	2551
<b>Percent Owning Mortgages</b>	9	12	21	22	21
<b>Average Mortgage Wealth (\$)</b>	405	1068	1306	1019	771
<b>Mortgage/Wealth(%)</b>	6	10	12	14	12
<b>Percent Male</b>	78	77	63	73	70
<b>Percent Farmers</b>	23	9	14	44	41

# Summary of Trends

- Mortgages peak at different periods in each region
  - Manitoba - Peaks in 1917 at \$479
  - Thunder Bay District - Peaks in 1910 at \$1,140
  - Wentworth County - Peaks in 1912 at \$919
- Proportion of decedents reporting mortgages as an asset rises until World War I and then generally stabilizes in these three regions
- While there was a diversification into other financial assets as the 20<sup>th</sup> century wore on, there was still a demand for private mortgages as an asset that peaked later than the national formal financial asset sector figures would suggest.

# Manitoba: 1873-1927

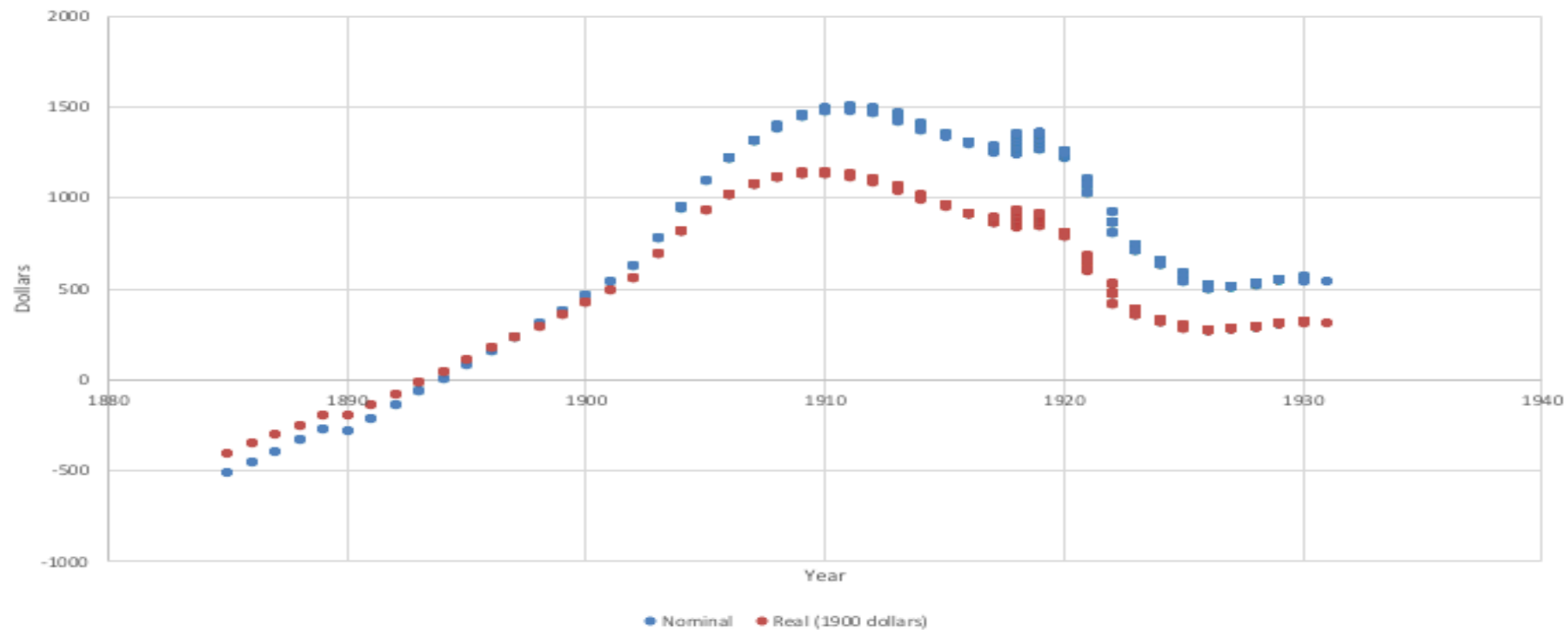
Figure 2: LOWESS Smooth (0.8 bandwidth) of Probate Mortgage Wealth, Manitoba, 1873 to 1927





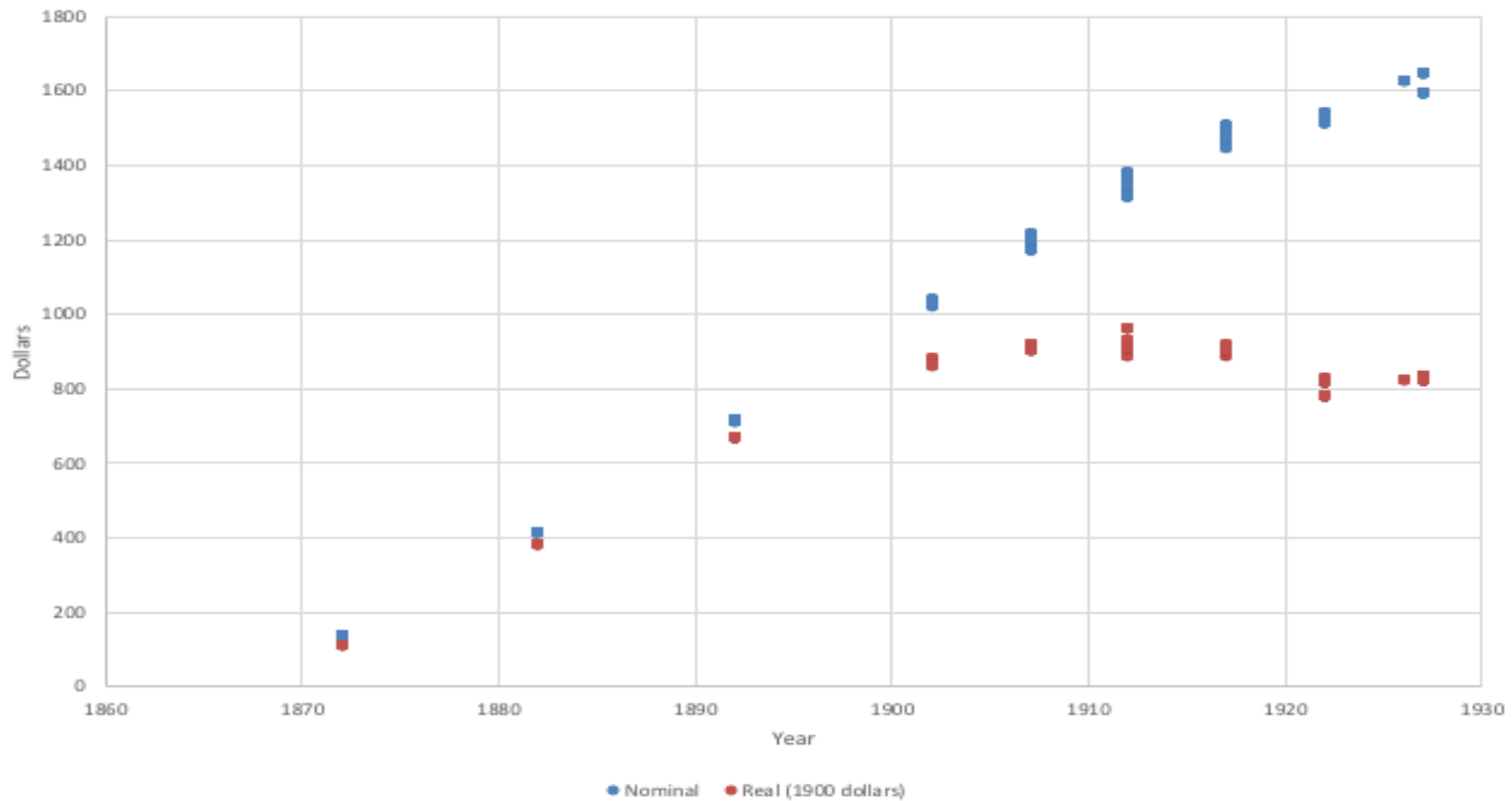
# Thunder Bay District, 1885-1931

Figure 3: LOWESS Smooth (0.8 bandwidth) of Probate Mortgage Wealth, Thunder Bay District, 1885 to 1931

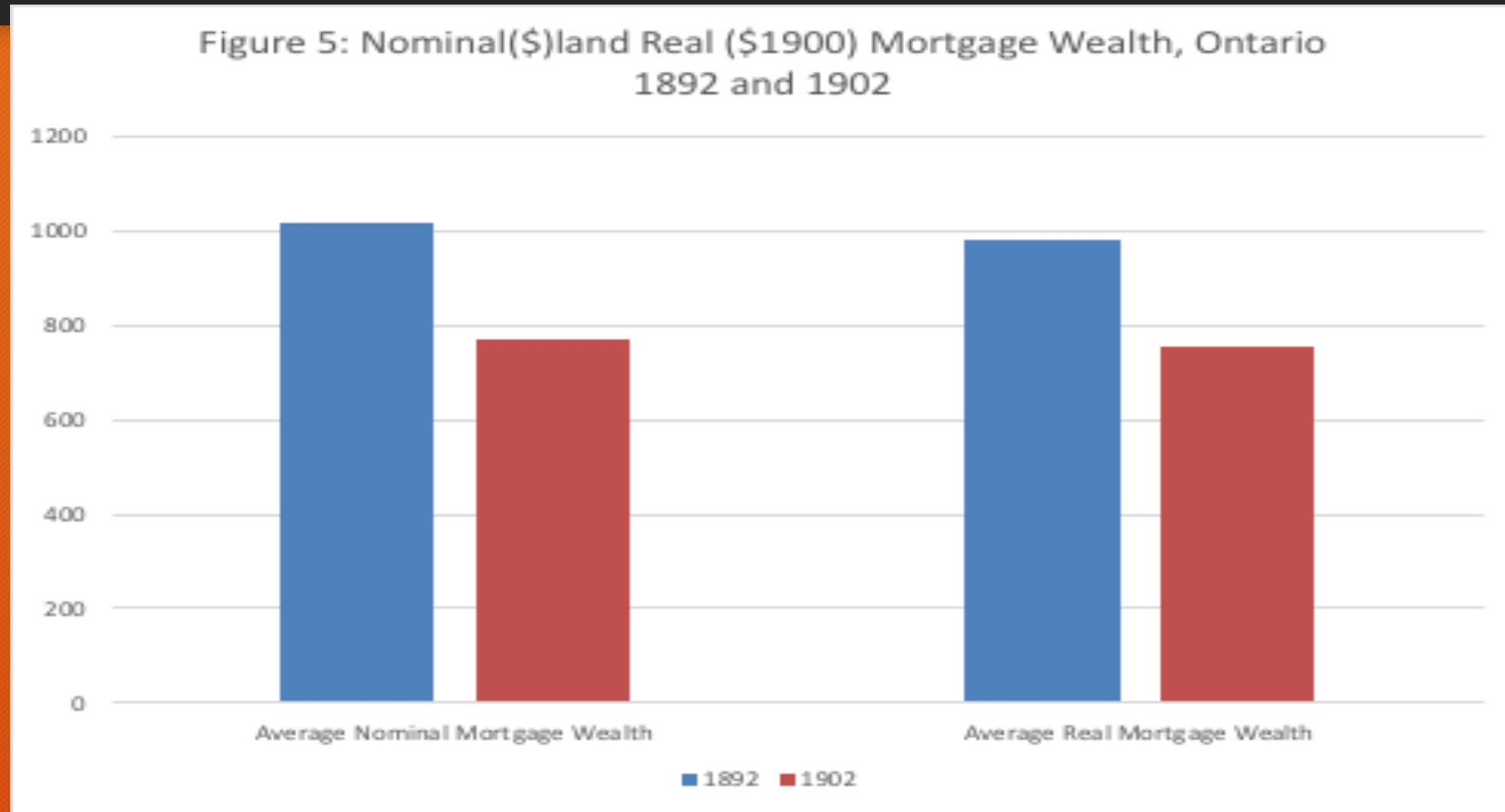


# Wentworth County, 1872-1927

Figure 4: LOWESS Smooth (0.8 bandwidth) of Probate Mortgage Wealth, Wentworth County, 1872 to 1927



# Ontario 1892 & 1902



# Regression Analysis

- Dependent variables: ownership and value held of mortgages
- OLS/Tobit/Probit
- Explanatory Variables: age, urbanization, high occupational status, being a farmer, place of birth, religious affiliation, marital status, literacy, regional effects (with the Golden Horseshoe region around Toronto as the omitted variable), number of children, a year fixed effects variable and the proportion of wealth held as financial assets (net of mortgage wealth), bank branch in location decedent resided.

# Regression Results

- Negative and significant determinants of value held and propensity to hold mortgages as an asset:
  - Age squared, farmer, Irish-born, Roman Catholic, married men, number of children, financial asset share of wealth, time trend (1902 versus 1892), bank branches (only at 10% level).
- Positive and significant determinants of value held and propensity to hold mortgages as an asset:
  - Age, urban dweller, literacy, higher occupational status, foreign born except for Irish-born, being a widow or single women, resident of northern Ontario & Huronia.

# Discussion

- Mortgages can be considered a substitute for other financial assets and the increase in wealth held as bank accounts, securities, stocks and bonds resulted in less wealth being held as mortgages - thus, other financial assets substituted for mortgages over time as financial sector developed.
- Literacy, age and high occupational status was correlated with a demand for mortgages as a private asset. However, this demand was also tempered by the effects of other social economic variables such as birthplace and religion.
- High occupational status individuals (Katz I & II) would have been a major driver of the use of private mortgages as a financial asset - over twice the value of lower status

Figure 6: Mortgage-Age LOWESS Profiles for High and Low Occupational Status Decedents, Ontario 1892 and 1902 (bwidth=0.8)

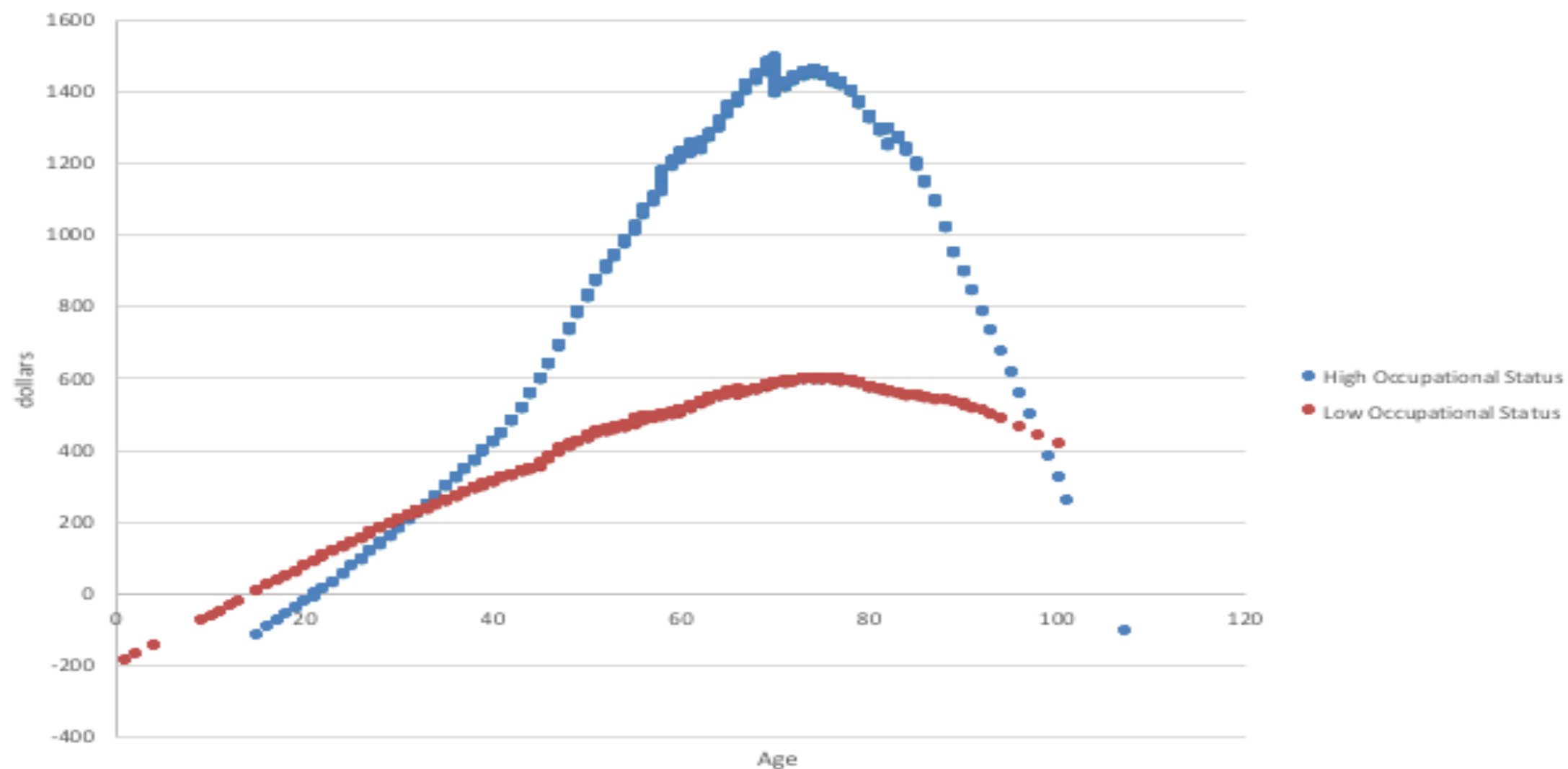
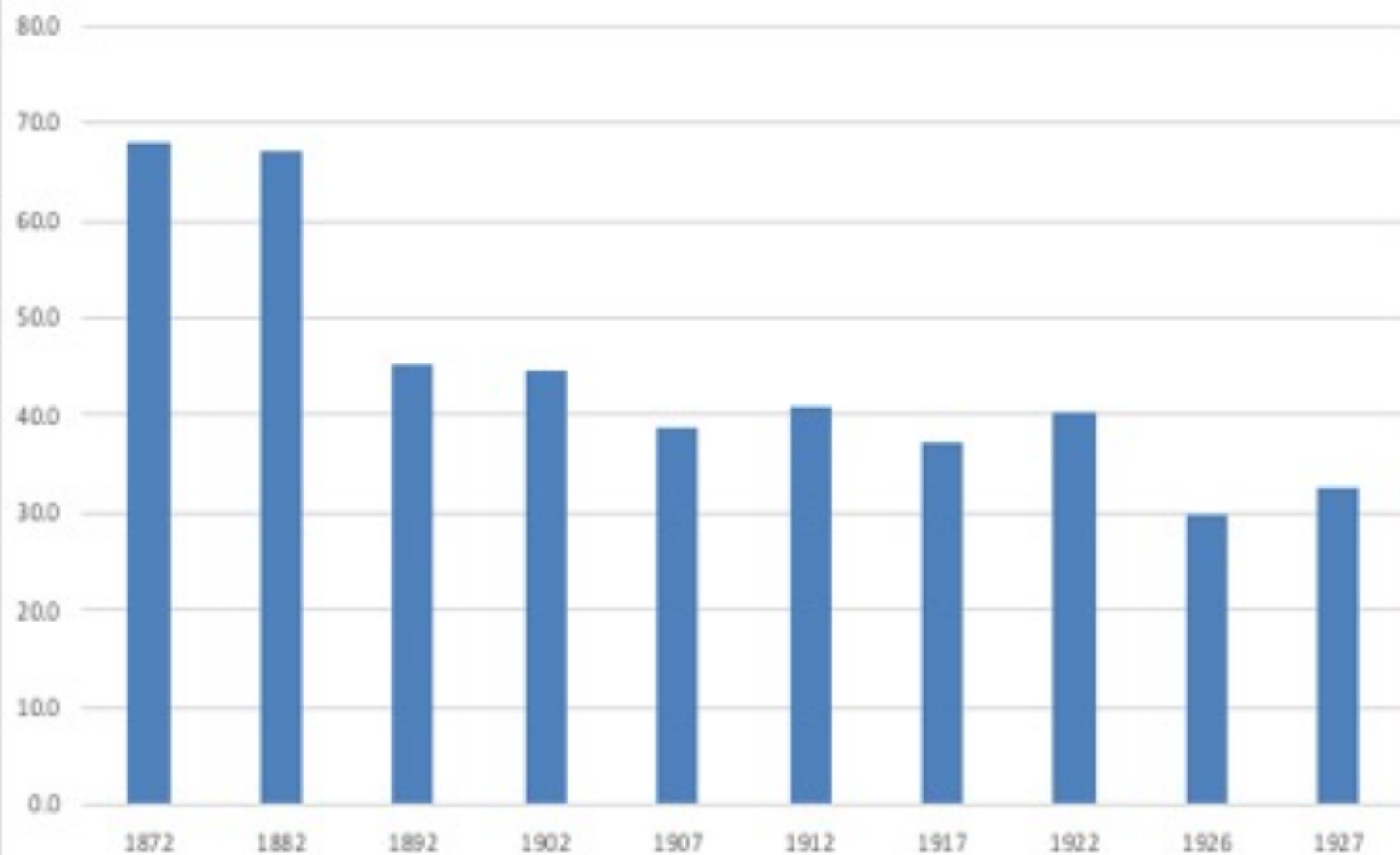




Figure 7: Percent of Wentworth County Decedents of High Occupational Status, 1872 to 1927



# Structural Economic Change Fuels Mortgage Investment Decline

- Eg. Wentworth County: The decline of the agricultural sector and farm employment, the rise of industrial occupations and the growth in female employment all served to reduce the share of decedents of high occupational status which fell from 68 percent in 1872 to 33 percent by 1927.
- Middle wealth holding classes grew over time and found the formal financial sector a more attractive option for investment compared to private mortgages with their relatively higher risk and higher transaction costs.

# Mortgages ultimately an investment elite tool

- Ontario 1892 and 1902
  - The top ten percent of the distribution: average wealth of \$39,100 and average mortgages held of \$6,167 with 54 percent of the top ten percent reporting they held a private mortgage as an asset.
  - Next 40 percent of the distribution, average wealth was \$5,877, average mortgage value was \$574 and 26 percent reported owning mortgages as an asset.
  - Bottom 50 percent, average wealth was \$1,229 with the average value of mortgages at \$94 and 11 percent reporting owning a mortgage.

# Conclusions

- Literacy, age and high occupational status positively correlated with a demand for private mortgages as an asset - also important portfolio device for widows and single women. Financial sector development served as substitute for private mortgages.
- Private mortgage lending in Canada was a financial tool that especially marked an era of more limited opportunities in terms of economic growth, employment, economic status and choice when it came to financial assets. A tool of the economic elite.
- With economic growth and development, the growth of the middle class and more equitable wealth distribution, and the spread of financial markets, private mortgage lending came to be increasingly relegated to a shrinking proportion of higher occupational status individuals.