

# Is There a Bubble in the Toronto Housing Market?

Will Dunning

March 27, 2004

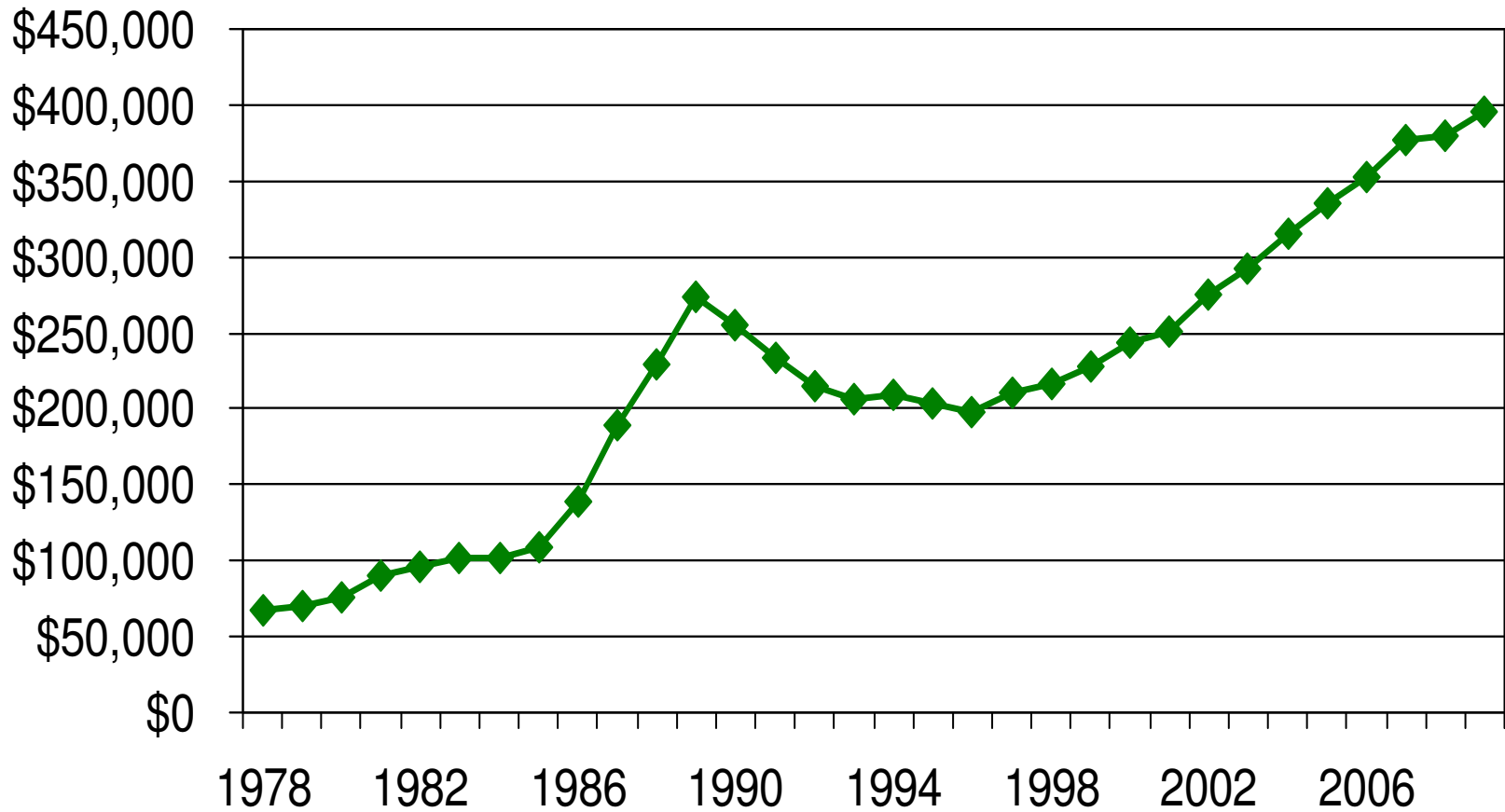
(Selected Updates August 2010)

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# GTA Average House Price



Source: Toronto Real Estate Board

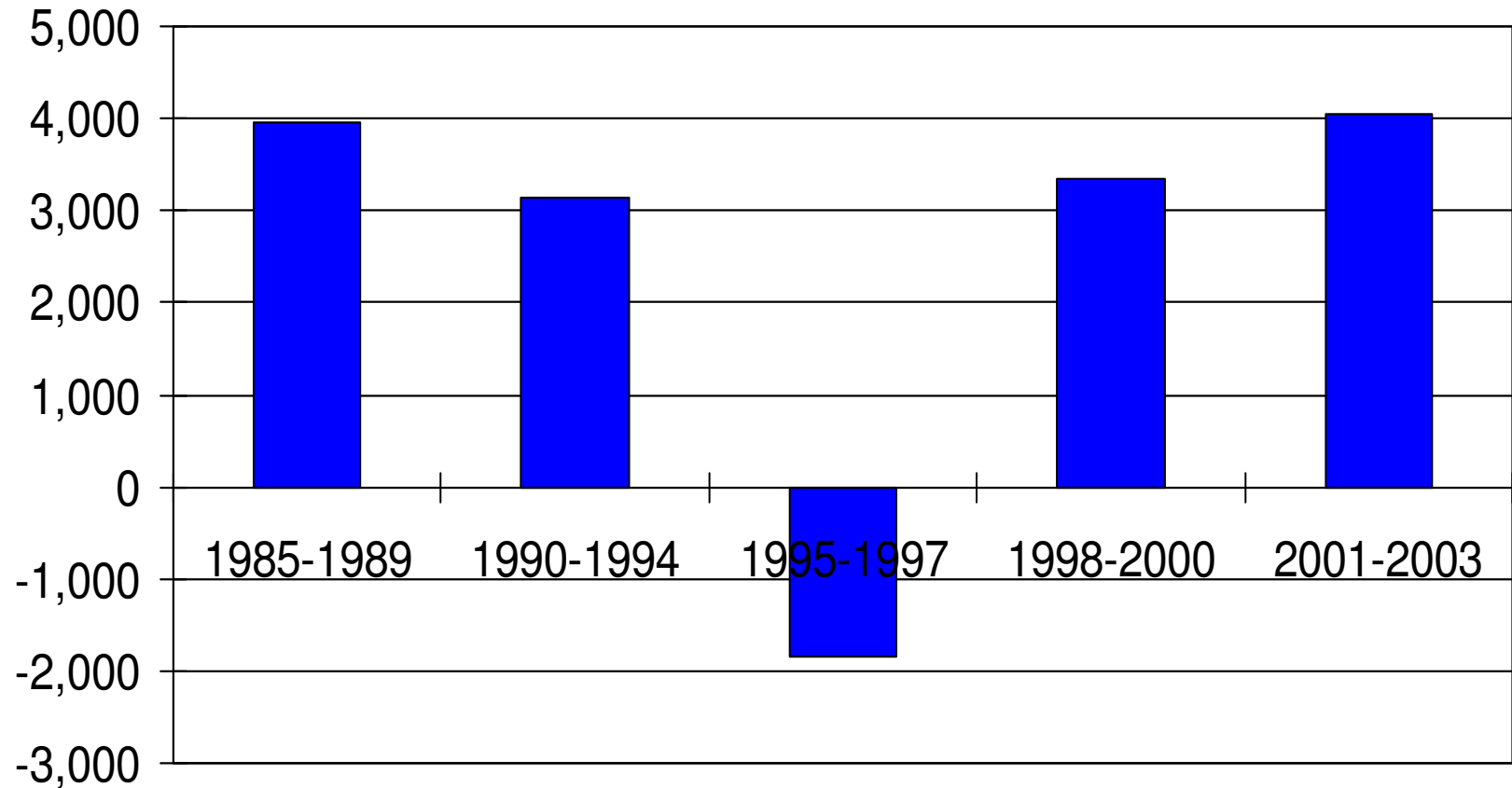
# Elements of a Bubble

- Expectations of price increase are a primary motivator
- Expectations unrealistic
- Prices divorced from “value”
- Speculation/flipping
- Panic buying
- Little appreciation of risk
- Creation of a self-contained feedback loop & self-fulfilling expectations

# A Weak Investment Motive is Healthy

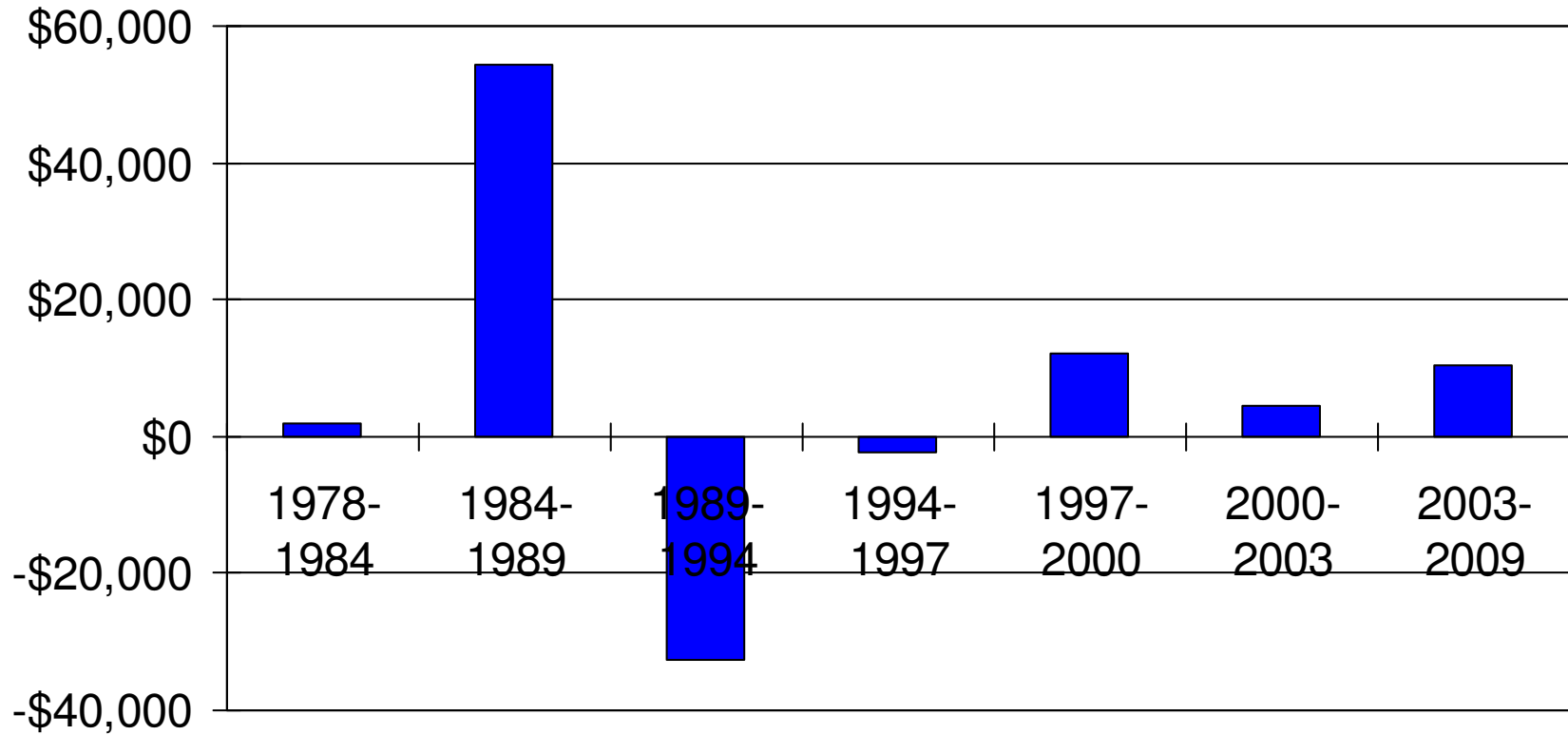
- Real property is an inflation hedge
- Living costs match income flows over a life-time
- Principal residences may be tax-favoured
- Investment motive appears to be suitably weak most of the time

# Impact of \$10,000 Real Price Increase on Annual Sales (*Not Updated*)



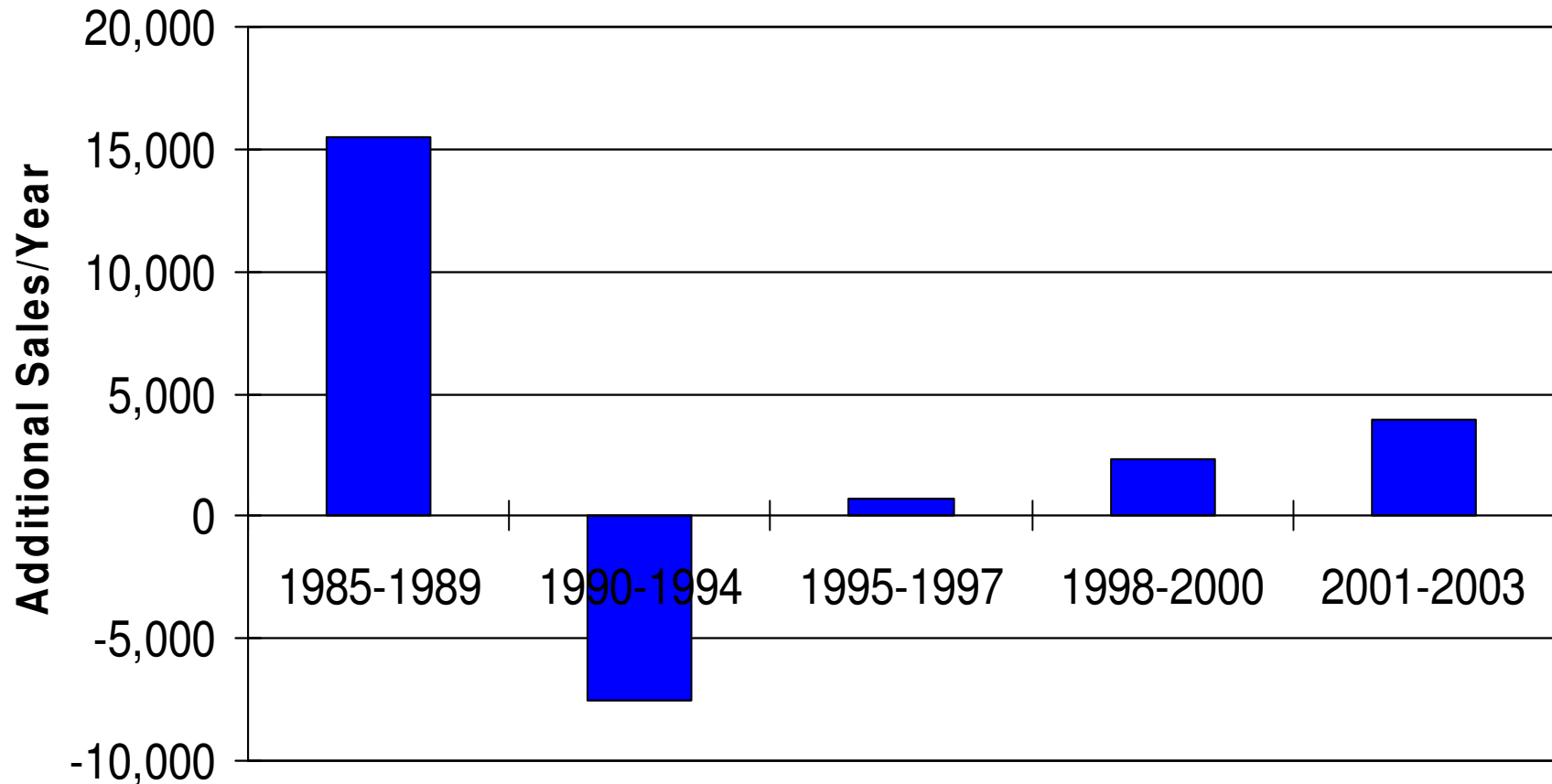
Source: Will Dunning Inc.

# Annual Average Price Increase in “Real” (2002) Dollars



Source: Will Dunning Inc.

# Impact of “Real” Price Increase on Annual Sales (*Not Updated*)



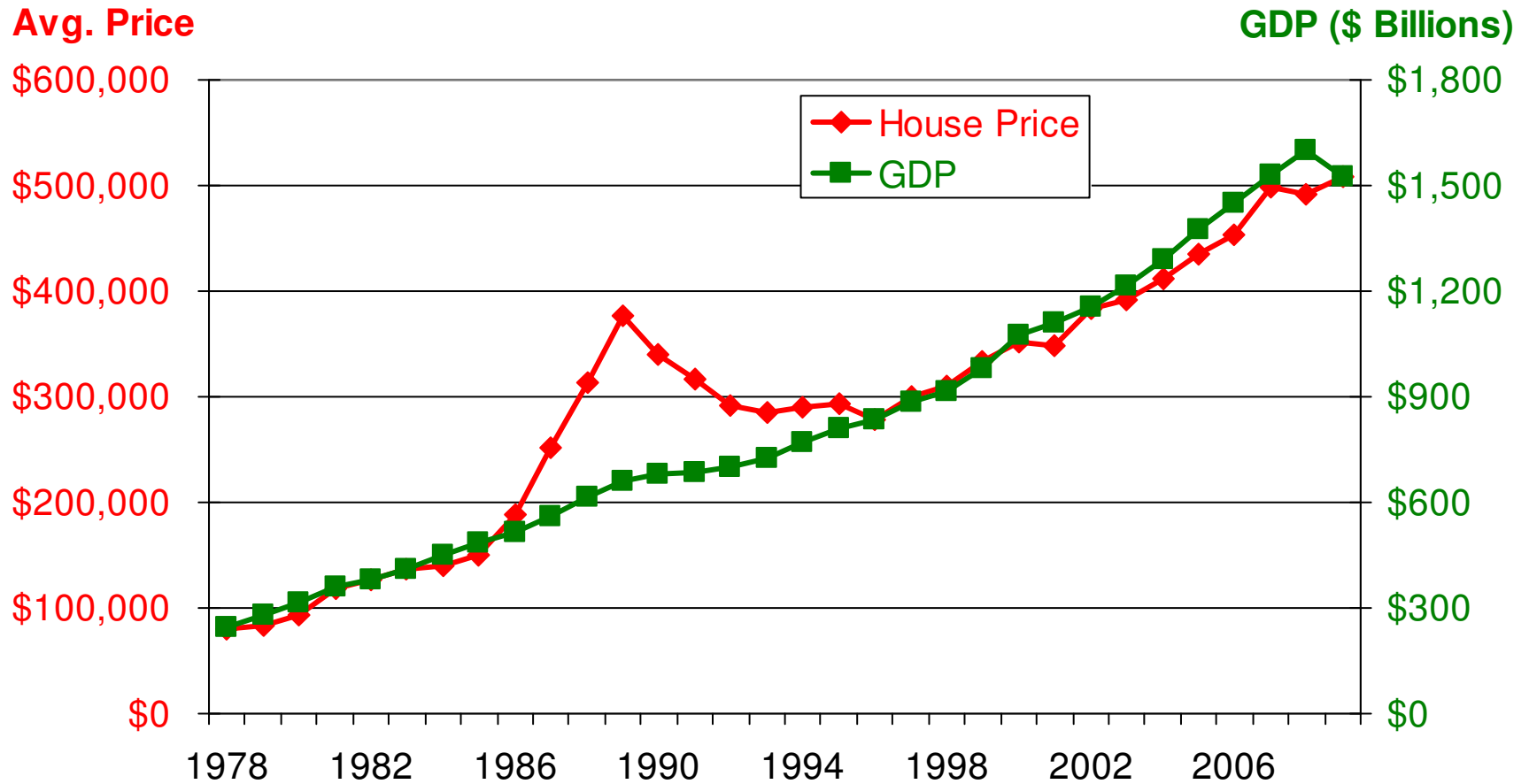
Source: Will Dunning Inc.

# What are Realistic Expectations About Value Growth?

- David Ricardo – 1817. Economic growth is related to land value increases in excess of inflation.
- In an expanding urban area, value growth exceeds inflation inside the frontier.
- As an approximation, Ricardo's theory might imply that “intra-marginal” (eg. central Toronto) house price growth could match economic growth.



# Central Toronto Average House Price Tracks Canada's GDP

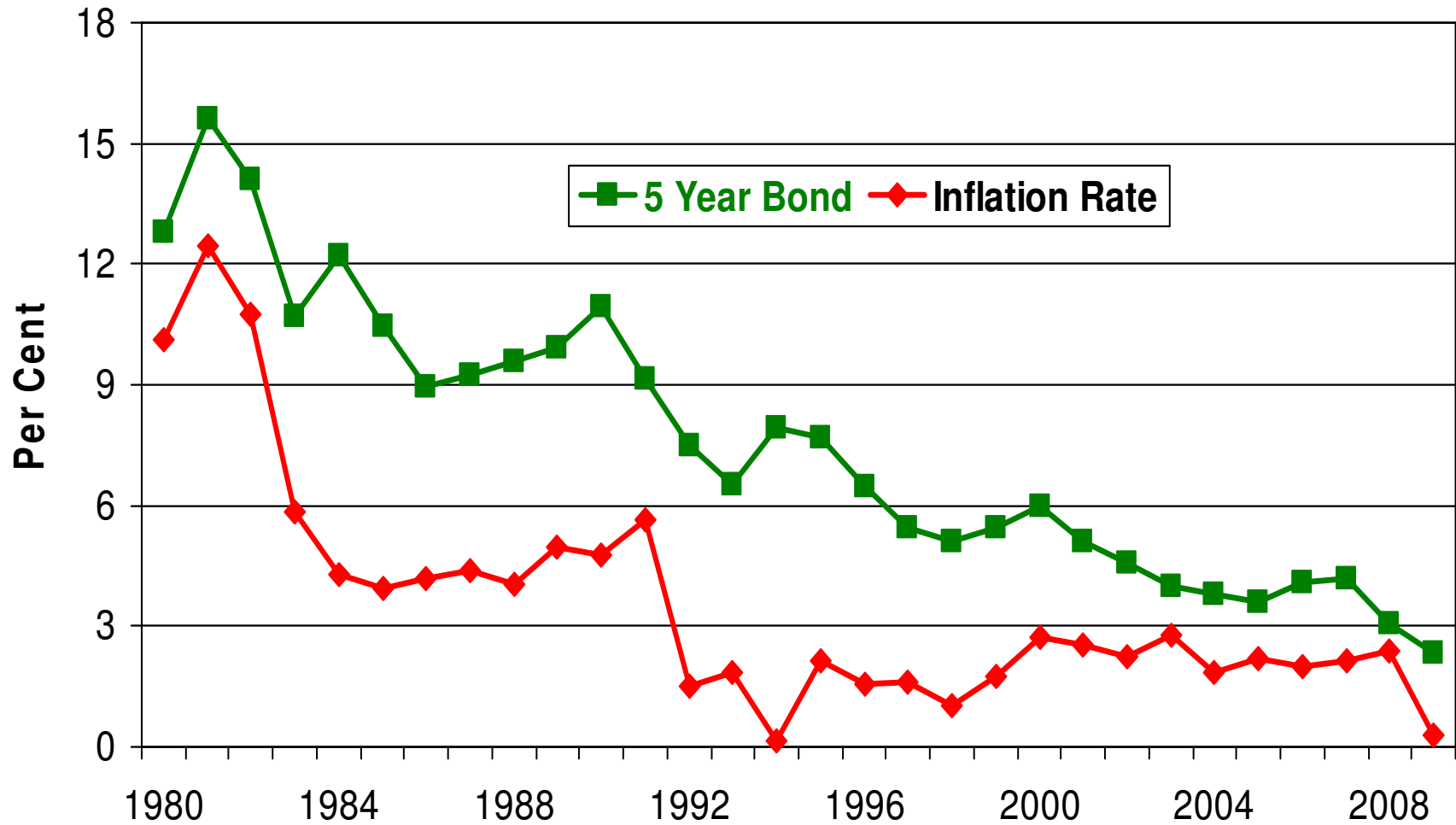


Sources: TREB/Statistics Canada

# Do House Prices Match “Use Value”?

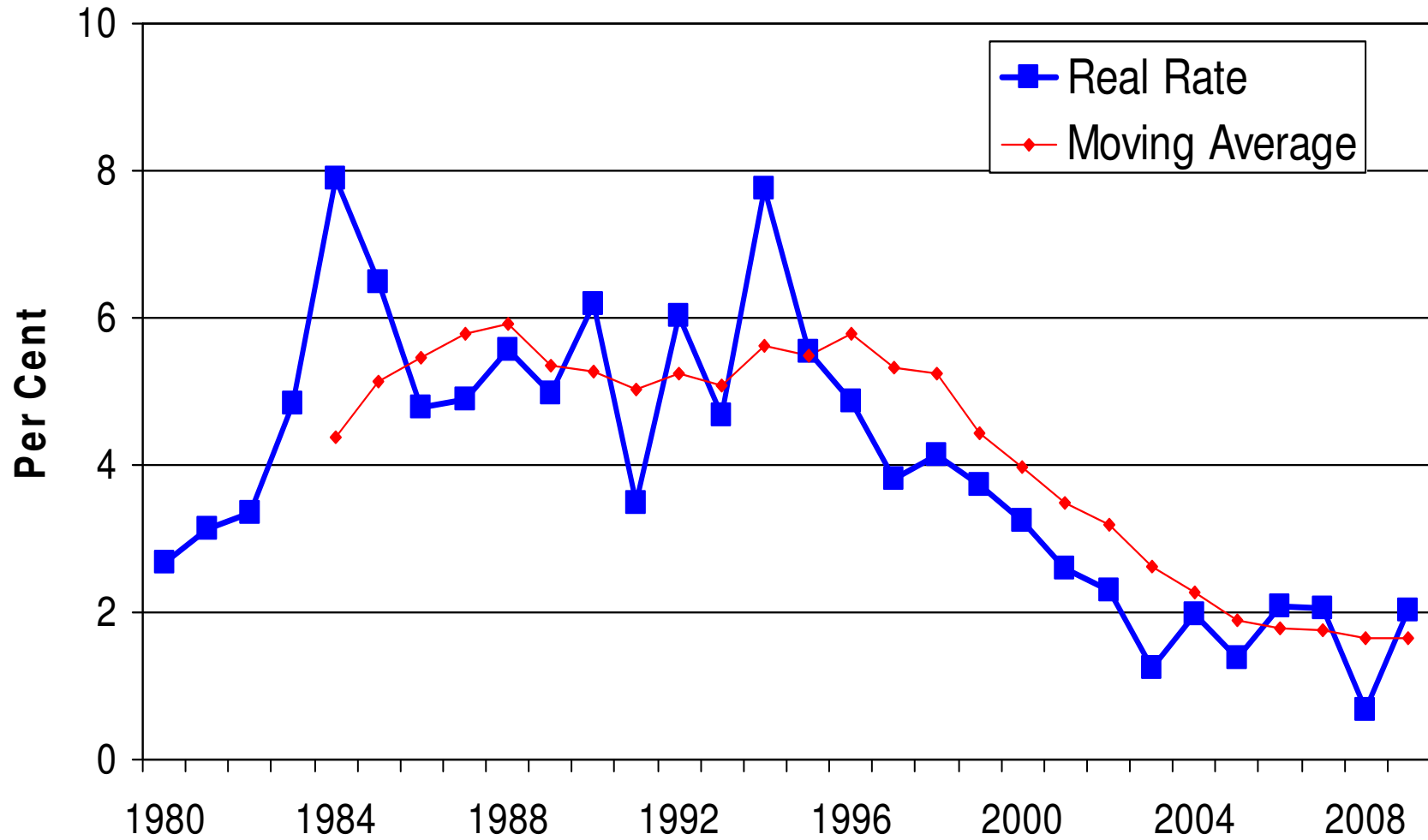
- What is “use value”?
- Value that results from enjoyment, convenience, etc.
- NPV of stream of annual use values.
- If assume annual use value is constant in real terms, total “Use Value” is a function of the “real” discount rate.
- Estimates indicate that house prices have not tracked use value, and so current prices leave room for interest rates to rise in the recovery.

# Bond Yields and Inflation



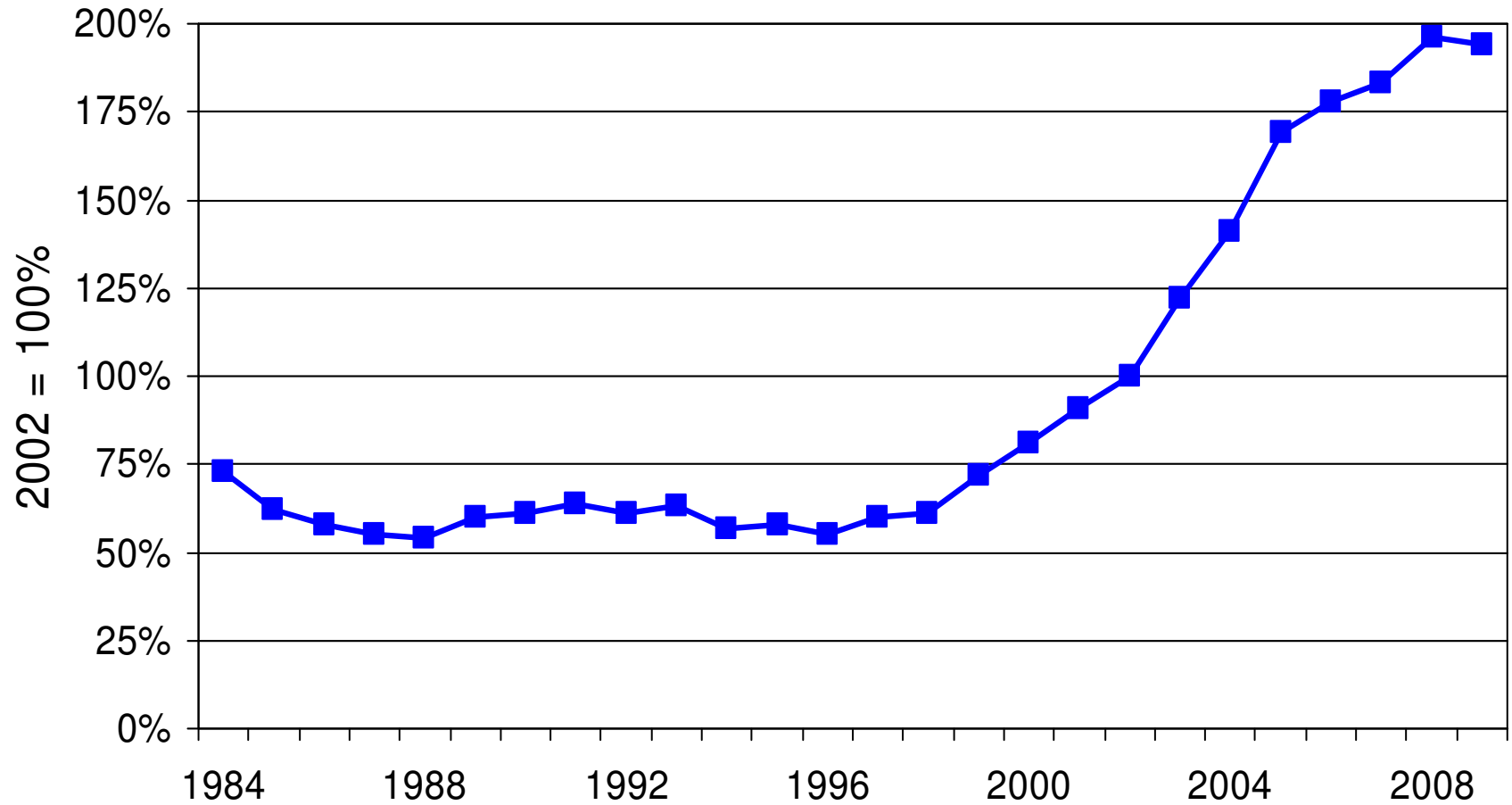
Sources: Statistics Canada/Will Dunning Inc.

# Real 5 Year Bond Yield (Discount Rate)



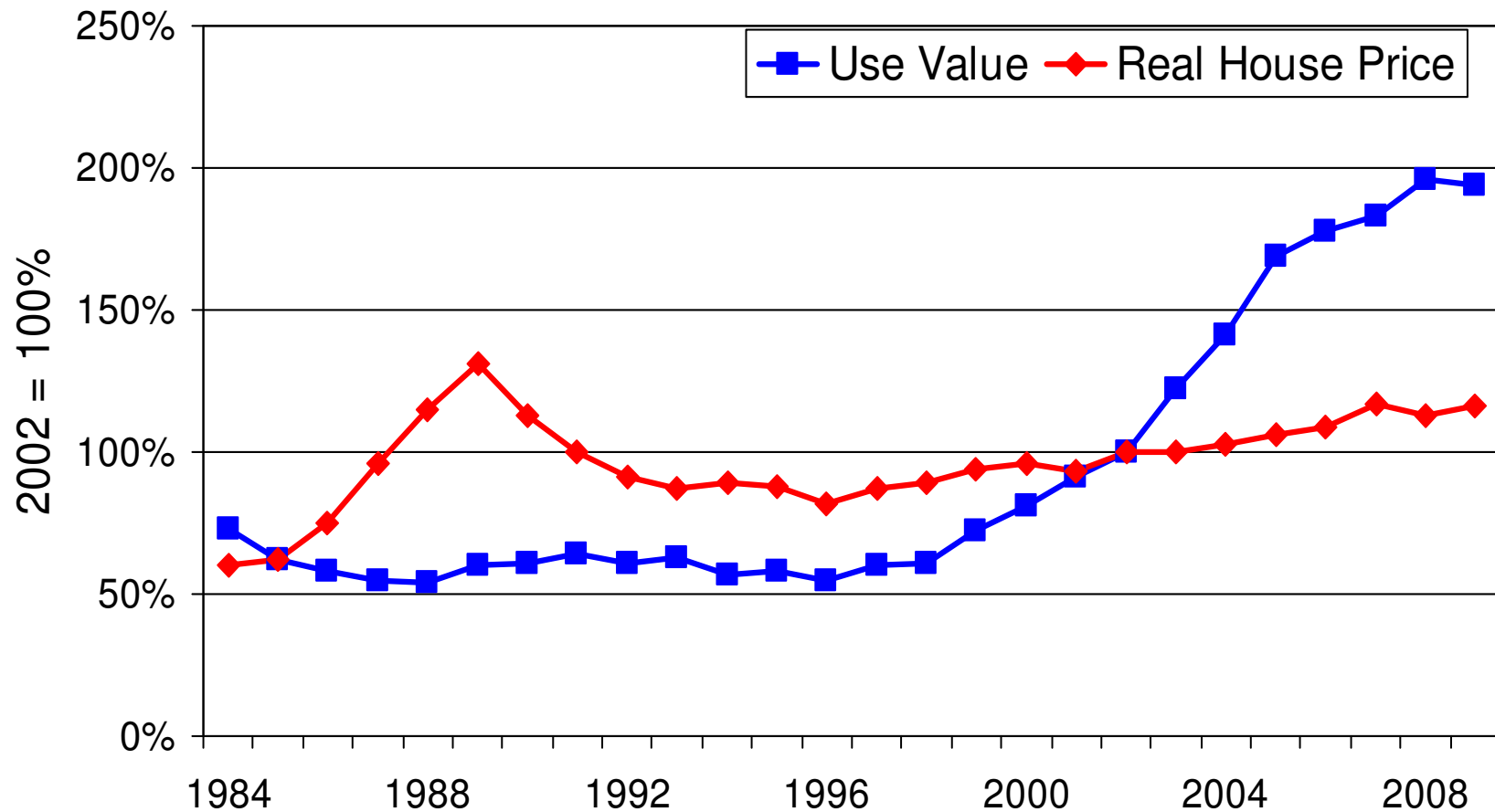
Sources: Will Dunning Inc.

# Index of Housing "Use Value"



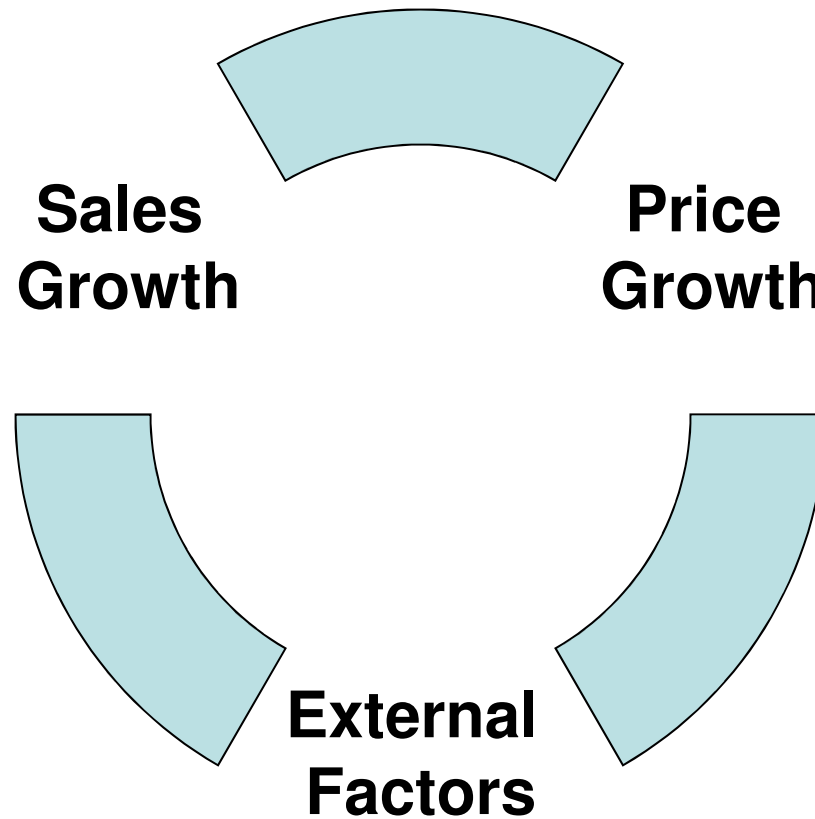
Sources: Will Dunning Inc.

# House Prices in Central Toronto Versus “Use Value”



Sources: WDI/TREB/Statistics Canada

# A Healthy Market Cycle



# A Bubble





# Conclusions

- Toronto housing market is driven by fundamentals: job creation and affordability, plus a reasonable investment motive.
- No evidence of excessive expectations.
- Value growth can be explained without recourse to a bubble theory.
- Recent increases (late 2009 and early 2010) might be out of line (perhaps 5%), but this small, short-term variation does not invalidate a longer-term conclusion.
- It does suggest there could be a small downward adjustment of real values, either through a small drop in house prices, or a period of slow growth.