OF CANADA FINANCIAL MARKETS

NATIONAL BANK

November 15, 2024 - (Vol. VIII, No. 92)

Canada's underlying productivity problem laid bare (again)

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Fresh estimates of Canada's non-residential capital stock lay bare a key contributor to our abysmal productivity record: insufficient investment.

In 2023, Canada's non-residential capital stock, net of depreciation, amounted to \$2.6 trillion (2017 constant dollars) (Chart 1). That figure covers all industries, including government (Chart 2). The non-residential capital stock did manage to grow a bit last year, as new investment technically exceeded depreciation. But a 1.2% year-overyear expansion is no reason to rejoice. For some time now, the pace of net capital accumulation has been lukewarm at best (Chart 3).

In per capita terms, Canada's capital stock peaked almost a decade ago. Since 2015, the real value of capital notionally available to the average Canadian has shrunk 5% (Chart 4). Little wonder we're having difficulty generating more for a given hour of work. Sort of flips that old adage on its head; in Canada, we're 'working harder, not smarter'.

Another dimension to an already gloomy picture? The remaining useful life of Canada's capital stock is getting shorter... year after year after year. You won't find a lower remaining useful service life ratio since StatCan started estimating it (with data back to 2009) (Charts 5-6).

Arresting these well-established patterns will require no little amount of new investment. Yet, businesses are understandably cautious. The stated goals of America's incoming administration risk tipping the scales (even further) against us on relative tax and regulatory burdens. Any potential loss of relative competitiveness could inhibit much-needed new investment north of the border, to say nothing of prospective tariffs which could making doing business in Canada less predictable (and profitable) for export-orientated firms.

Meantime, the relative skew/balance of the capital stock speaks to the faulty/risky growth model Canada has pursued for some time, one that's overly housing-centric. Consider: Even with restrictive interest rates weighing on the housing market, Canada has ever more of its real capital allocated to residential property than to non-residential buildings, engineering, machinery/equipment and IP (Chart 7). This imbalance is more extreme in some regions than others (Chart 8). It's not that housing capital is bad mind; we need *more* housing. But the national



(2017 dollars) 2.50 2.25 Residential 2.00 175 Non-residential 1.50 1.25 1.00 0.75 0.50 0.25 1975 2010 2015 2000 2005 980 985 066 1995 2020 67

Source: NBC, StatCan | Note: Stock net of geometric depreciation; latest data point is 2023

capital scale has been tipped notably towards residential over nonresidential investment for ages. Beyond poor productivity, an offshoot of this is a relatively heavily indebted household sector, which left the economy ultra-sensitive to (still) restrictive policy interest rates.

There are additional angles one could pursue with this dataset, be more detailed industry-by-industry or region-by-region comparisons. There's even an ability to isolate absolute/relative investment, depreciation and useful life trends in very specific elements of the non-residential capital stock. Clearly, more could be said or illustrated. But the simple point remains: An unrelenting underinvestment phenomenon helps inform Canada's current productivity crisis.

So who's problem is this? Everyone's really. Loosely speaking, investment begets productivity. Productivity growth in turn drives a country's long-term standard of living. If you've not noticed, Canada has been losing ground particularly vs. the traditional bellwether, the U.S.

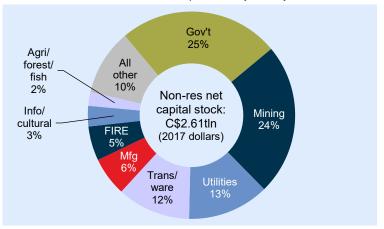
Effective investment that grows the non-residential capital stock and breeds enhanced productivity can lower business operating costs, boost corporate profitability and ultimately get workers paid. For governments, productivity growth can directly (and indirectly) lower the effective cost of providing vital social programs and effective/efficient public infrastructure. That becomes a vital consideration as populations age and more taxpayers head for retirement.

And oh yes, a vibrant capital stock that generates productivity gains can boost an economy's potential growth rate. More appropriately (in Canada's case), sustained underinvestment and the absence of productivity growth can lower the non-inflationary speed limit, all else equal. A (s)low speed-limit can mean more inflation for a given economic advance. Once again, investment-fueled productivity gains become seemingly more important when the other natural driver of potential—labour force growth—is arrested, as will be the case in Canada for the next couple of years as we go through a demographic detox. Makes this is an issue for the Bank of Canada too.

The problems then are legion; easy solutions, on the other hand, remain stubbornly elusive.

Chart 2: Where Canada's non-residential capital resides

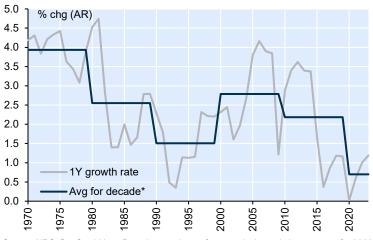
Distribution of Canada non-residential capital stock by industry: 2023



Source: NBC, StatCan | Note: Stock net of geometric depreciation

Chart 3: Non-res investment growth stuck in the mud

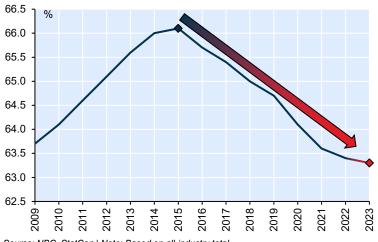
Growth in Canada non-residential capital stock: Annual & average by decade



Source: NBC, StatCan | Note: Based on stock net of geometric depreciation; average for 2020s is based on 4-year average (2020 to 2023 inclusive)

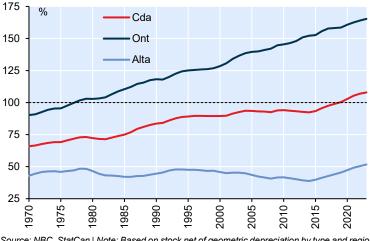
Chart 5: Get me off of this (useless) ride!

Canada remaining useful service life ratio of non-residential capital stock



Source: NBC, StatCan | Note: Based on all-industry total

Chart 7: Canada's housing-centric model (still) on display Ratio of residential to non-residential capital stock: Canada, Ontario, Alberta



Source: NBC, StatCan | Note: Based on stock net of geometric depreciation by type and region (in 2017 dollars)

Chart 4: Increasingly less capital available for each Canadian

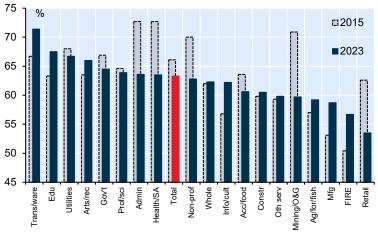
Canada non-residential capital stock on per capita basis



Source: NBC, StatCan | Note: Stock net of geometric depreciation divided by annual population; latest data point is 2023; peak value achieved in 2015

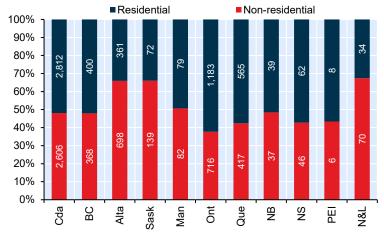
Chart 6: Industry perspective on remaining useful life

Canada remaining useful service life ratio of non-res capital stock by industry



Source: NBC, StatCan | Note: 2015 included for reference (peak ratio for all-industry total)

Chart 8: The capital stock balance struck across the nation Relative balance of residential & non-residential capital stocks by province: 2023



Source: NBC, StatCan | Note: Based on stock net of geometric depreciation by type and region; values in each column are C\$bln (in 2017 dollars)

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