

How Alternative Canadian Asset Price Indexes Compare to Contemplated Macro Indexes¹

EUCPI ²				Implicit Capital Stock Deflators ³						Implicit Price Indexes ⁴						IPC ⁵														
Canada				Canada		Quebec		Ontario		Canada		Quebec		Ontario		Quebec														
				All Industries	Utilities ⁶	All Industries	Utilities ⁶	All Industries	Utilities ⁶	Business gross fixed capital formation	GDIPI FDD	Business gross fixed capital formation ⁷	GDIPI FDD	Business gross fixed capital formation	All Items ⁷															
Distribution Systems	Substations	Total Non-Residential	Total Non-Residential	Total Non-Residential	Total Non-Residential	Total Non-Residential	Total Non-Residential	Total Non-Residential	Total Non-Residential	GDIPI FDD ⁷	formation	GDIPI FDD	formation ⁷	GDIPI FDD	formation	All Items ⁷														
1990	98.5	3.1%	104.3	0.7%	68.2	3.4%	72.2	4.5%	74.6	3.3%	76.3	4.4%	70.9	2.8%	75.9	4.2%	72.3	3.8%	76.8	1.2%	76.1	3.7%	87.1	1.0%	74.8	3.4%	87.9	-0.1%	79.2	4.3%
1991	97.7	-0.8%	99.9	-4.3%	67.1	-1.6%	71.5	-1.0%	73.0	-2.1%	75.5	-1.0%	69.2	-2.4%	75.0	-1.2%	74.7	3.3%	75.9	-1.2%	78.6	3.2%	85.0	-2.4%	77.1	3.0%	86.4	-1.7%	85.0	7.1%
1992	100.0	2.3%	100.0	0.1%	67.6	0.8%	70.9	-0.8%	73.7	1.0%	74.6	-1.2%	70.0	1.0%	74.7	-0.4%	76.2	2.0%	76.5	0.8%	79.9	1.6%	85.4	0.5%	78.1	1.3%	83.8	-3.1%	86.6	1.9%
1993	102.5	2.5%	103.0	3.0%	68.5	1.3%	71.1	0.3%	73.8	0.1%	74.6	0.0%	70.4	0.6%	73.6	-1.5%	77.6	1.8%	77.9	1.8%	80.9	1.2%	86.5	1.3%	79.5	1.8%	84.7	1.1%	87.7	1.3%
1994	108.2	5.4%	107.9	4.6%	70.9	3.5%	73.9	3.8%	76.3	3.3%	77.4	3.7%	73.0	3.7%	76.4	3.8%	78.9	1.7%	80.5	3.3%	81.8	1.1%	89.6	3.5%	80.6	1.4%	87.6	3.4%	86.6	-1.3%
1995	116.7	7.6%	111.8	3.6%	72.6	2.3%	75.1	1.7%	78.1	2.4%	78.8	1.8%	75.1	2.8%	77.9	2.0%	79.8	1.1%	80.9	0.5%	82.5	0.9%	90.0	0.4%	81.5	1.1%	87.8	0.2%	88.1	1.7%
1996	116.6	-0.1%	111.8	0.0%	74.5	2.6%	77.4	3.0%	80.0	2.5%	81.3	3.1%	77.0	2.6%	80.2	2.8%	80.7	1.1%	81.2	0.4%	83.0	0.6%	89.1	-1.0%	82.3	1.0%	86.9	-1.0%	89.5	1.6%
1997	118.0	1.2%	113.7	1.7%	76.9	3.1%	80.3	3.7%	83.3	4.0%	84.5	3.9%	80.0	3.9%	84.7	5.5%	82.0	1.6%	82.6	1.7%	84.0	1.2%	90.4	1.4%	83.5	1.4%	88.3	1.6%	90.8	1.4%
1998	122.8	4.0%	119.4	4.9%	79.3	3.0%	83.0	3.3%	85.7	2.9%	87.0	2.9%	82.7	3.3%	87.8	3.5%	83.2	1.5%	84.1	1.8%	85.0	1.2%	91.4	1.1%	84.9	1.7%	90.0	1.9%	92.1	1.4%
1999	126.1	2.7%	120.6	1.0%	80.5	1.5%	83.7	0.9%	87.1	1.5%	87.2	0.2%	84.3	1.9%	88.8	1.2%	84.3	1.3%	84.1	0.0%	86.2	1.4%	90.9	-0.5%	86.0	1.3%	89.4	-0.7%	93.5	1.5%
2000	128.7	2.0%	122.5	1.6%	83.0	3.1%	85.4	2.0%	89.5	2.8%	88.1	1.0%	87.8	4.0%	91.0	2.4%	86.5	2.6%	85.0	1.1%	88.4	2.5%	91.2	0.3%	88.0	2.3%	89.9	0.6%	95.8	2.4%
2001	129.6	0.7%	125.4	2.3%	84.8	2.1%	87.3	2.2%	91.6	2.3%	90.9	3.2%	89.8	2.3%	92.3	1.4%	88.2	1.9%	86.5	1.7%	90.0	1.8%	92.9	1.8%	89.9	2.1%	92.1	2.4%	98.0	2.3%
2002	130.5	0.7%	127.8	1.9%	86.0	1.4%	87.8	0.6%	93.2	1.7%	91.9	1.0%	90.4	0.7%	92.0	-0.3%	90.3	2.4%	88.6	2.4%	92.0	2.2%	94.7	1.9%	91.8	2.1%	94.0	2.0%	100.0	2.0%
2003	130.6	0.1%	124.0	-3.0%	85.8	-0.2%	87.1	-0.8%	92.1	-1.1%	89.8	-2.3%	90.8	0.3%	92.0	0.0%	91.7	1.5%	88.5	-0.1%	93.5	1.6%	95.0	0.3%	93.3	1.6%	94.3	0.3%	102.5	2.5%
2004	131.1	0.4%	125.4	1.1%	88.3	2.9%	90.0	3.3%	93.8	1.8%	92.2	2.7%	92.8	2.2%	94.7	2.9%	93.4	1.8%	90.7	2.5%	95.0	1.6%	96.5	1.6%	94.8	1.6%	96.1	1.9%	104.5	1.9%
2005	133.6	1.9%	127.7	1.8%	91.3	3.4%	92.7	2.9%	95.7	2.0%	94.5	2.5%	94.5	1.8%	96.0	1.4%	95.4	2.1%	92.5	2.0%	96.8	1.9%	97.1	0.6%	96.6	1.9%	96.6	0.5%	106.9	2.3%
2006	142.4	6.4%	132.6	3.8%	95.7	4.7%	96.2	3.7%	98.0	2.4%	97.4	3.1%	97.1	2.8%	97.3	1.4%	97.6	2.3%	96.0	3.7%	98.3	1.5%	98.5	1.4%	98.1	1.5%	97.7	1.1%	108.7	1.7%
2007	148.8	4.4%	139.5	5.1%	100.0	4.4%	100.0	3.8%	100.0	2.0%	100.0	2.6%	100.0	2.9%	100.0	2.8%	100.0	2.4%	100.0	4.1%	100.0	1.7%	100.0	1.5%	100.0	1.9%	100.0	2.3%	110.4	1.6%
2008	150.3	1.0%	147.5	5.6%	106.4	6.2%	106.4	6.2%	105.9	5.7%	107.0	6.8%	106.1	5.9%	106.6	6.4%	102.5	2.5%	103.5	3.4%	102.0	2.0%	103.4	3.3%	102.2	2.2%	103.0	3.0%	112.7	2.1%
2009	151.1	0.5%	149.5	1.3%	107.8	1.3%	109.6	2.9%	109.4	3.3%	110.6	3.3%	108.3	2.0%	111.4	4.3%	103.7	1.2%	105.5	1.9%	103.0	1.0%	106.3	2.8%	103.2	1.0%	105.4	2.3%	113.4	0.6%
2010	155.1	2.6%	149.3	-0.1%	108.5	0.7%	110.6	1.0%	109.1	-0.3%	110.9	0.3%	108.1	-0.2%	112.5	1.1%	104.8	1.1%	105.5	0.0%	103.9	0.9%	105.9	-0.4%	104.4	1.2%	104.7	-0.7%	114.8	1.2%
2011	160.1	3.2%	151.8	1.7%	111.4	2.6%	113.3	2.4%	111.7	2.4%	113.4	2.2%	111.0	2.6%	114.3	1.6%	107.3	2.4%	107.3	1.7%	106.4	2.4%	107.7	1.7%	107.2	2.6%	106.5	1.7%	118.3	3.0%
2012	161.5	0.9%	152.4	0.4%	114.5	2.7%	116.3	2.7%	115.0	2.9%	117.7	3.8%	113.0	1.9%	115.7	1.2%	109.1	1.7%	109.7	2.2%	108.3	1.8%	109.7	1.8%	108.7	1.4%	109.4	2.7%	120.8	2.1%
2013	160.2	-0.8%	153.6	0.8%	117.9	2.9%	119.7	2.8%	117.9	2.5%	120.9	2.7%	115.5	2.1%	119.3	3.1%	111.0	1.7%	111.2	1.4%	110.5	2.0%	110.8	1.0%	110.6	1.7%	111.0	1.5%	121.7	0.7%
2014	160.4	0.1%	159.0	3.5%	121.0	2.6%	122.7	2.5%	119.9	1.8%	123.6	2.2%	117.9	2.1%	122.8	2.9%	113.5	2.2%	115.0	3.4%	112.7	2.0%	114.3	3.1%	113.2	2.3%	115.4	3.9%	123.4	1.4%
2015	na	na	na	na	123.5	2.1%	126.0	2.6%	123.4	2.9%	126.3	2.2%	121.9	3.3%	127.0	3.4%	115.4	1.7%	118.7	3.2%	114.4	1.5%	117.6	2.8%	115.2	1.8%	120.7	4.5%	124.7	1.0%
2016	na	na	na	na	125.9	1.9%	128.4	1.9%	125.5	1.7%	129.0	2.1%	123.8	1.5%	129.4	1.8%	116.9	1.3%	121.6	2.4%	115.4	0.9%	119.4	1.5%	117.0	1.6%	124.8	3.3%	125.6	0.7%

Average Annual Growth Rates																
1990 - 2014	2.1%	1.7%	2.4%	2.3%	2.0%	2.1%	2.1%	2.1%	2.1%	2.0%	1.7%	1.7%	1.1%	1.8%	1.1%	1.9%
1990 - 2016	NA	NA	2.4%	2.3%	2.1%	2.1%	2.2%	2.1%	2.1%	1.9%	1.7%	1.7%	1.2%	1.8%	1.3%	1.9%
2007 - 2016	NA	NA	2.7%	2.9%	2.5%	2.8%	2.4%	2.9%	2.9%	1.8%	2.4%	1.6%	1.9%	1.8%	2.4%	1.4%
Standard Deviation of Growth Rates																
2007 - 2014	1.7%	2.2%	1.7%	1.5%	1.7%	1.8%	1.7%	1.8%	1.8%	0.6%	1.3%	0.5%	1.2%	0.6%	1.3%	0.8%

Notes

¹ All growth rates are computed logarithmically. For example, growth rate of X = ln(X_t - X_{t-1})² Electric Utility Construction Price Index (Statistics Canada, Table 327-0011)³ Flows and Stocks of Fixed Non-Residential Capital (Statistics Canada, Table 031-0005)⁴ Implicit Price Indexes, Gross Domestic Product (Statistics Canada, Table 384-0039)⁵ Consumer Price Index (Statistics Canada, Table 326-0020)⁶ The utilities sector of the Canadian economy comprises electric, water and sewage utilities, and natural gas distributors.⁷ Indexes in shaded columns have been discussed in the proceeding for possible inclusion in HQD's revenue cap index.