

## BC Housing Outlook

- BC's major housing markets have cooled sharply in early 2018. While much of the slowdown likely reflects buyers bringing forward purchases ahead of the new stress test rules that took effect on January 1, strained affordability, rising interest rates and additional provincial tax measures all are expected to weigh on sales activity this year.
- While the latest market and policy shifts may slow near-term price increases, notably for units at or above median prices, land constraints and population growth are expected to continue to pressure prices over the medium- and longer-term. Notwithstanding the pickup in homebuilding in recent years, more supply is needed to move rental and homeowner markets back into better balance, particularly at low- and mid-price points.
- The Province's 30-point *Homes for B.C.* supplements existing measures to respond to the complex challenge and escalating housing issues beyond Vancouver, in Kelowna, the Fraser Valley, and south Vancouver Island. The *Plan's* expected three-year outcome is measured progress on a longer-term workout. But, as the Province acknowledges, the cumulative housing supply shortfall for low- and middle-income families is large, requiring extended action, hence its ten-year goals. Thus, for moderately priced homes, such as row or apartment units, prices for at least the next few years are still likely to outstrip income gains.

### REGULATORY CHANGES ADD TO MARKET VOLATILITY

Sales activity across BC's major housing markets, including Greater Vancouver, the Fraser Valley and Victoria, has cooled sharply in the opening months of 2018. The weakening in demand follows strong sales in late 2017, suggesting many buyers pulled forward their purchases ahead of the new tougher mortgage stress tests that took effect January 1<sup>st</sup>. Taking a less volatile three-month trend shows a far less dramatic drop that leaves sales above their 10-year average (chart 1). Constrained listings and deteriorating affordability amid rapidly rising home prices and recent interest rate increases may also be contributing to the moderation in demand. A clearer underlying picture of the industry's momentum should emerge in the coming months as buyers and sellers adjust to the new federal rules, as well as to the additional policy measures announced in BC's February budget.

**At the same time, home prices have continued to accelerate.** After a brief adjustment in 2016 following earlier federal regulatory tightening and the implementation of BC's foreign buyers tax, the composite benchmark house price (HPI) in Greater Vancouver hit a record CAD 1.084 mn in March, up 16% from a year earlier. In the highly competitive market for townhomes and condominiums, where demand is high and listings are scarce, prices have surged 18% y/y and 26% y/y, respectively. Demand and pricing remain much softer in the single-family home market out of reach for most first-time buyers and many move-up buyers.

### CONTACTS

**Adrienne Warren**  
416.866.4315  
Scotiabank Economics  
[adrienne.warren@scotiabank.com](mailto:adrienne.warren@scotiabank.com)

**Mary Webb**  
416.866.4202  
Scotiabank Economics  
[mary.webb@scotiabank.com](mailto:mary.webb@scotiabank.com)

**Marc Desormeaux**  
416.866.4733  
Scotiabank Economics  
[marc.desormeaux@scotiabank.com](mailto:marc.desormeaux@scotiabank.com)

Chart 1



The strong momentum in home sales and price appreciation in Vancouver has spread to other municipalities in the province, both within and beyond commuting distance. Robust local job markets, steady population growth, and relatively better affordability, are among the factors contributing to historically strong housing demand in areas such as Victoria, Abbotsford-Mission and Kelowna, which alongside Vancouver account for more than two thirds of BC's population. Major agglomerations outside Vancouver have all witnessed stepped-up price gains in the last two years (chart 2). These centres also are benefitting from a steady migration of residents from the Vancouver CMA to other parts of British Columbia (chart 3). Their housing markets remain tilted in favour of sellers, with restrained resale listings insufficient to meet demand. Year-over-year house prices in February were up 14% in Victoria and 24% in the Fraser Valley.

**Sales activity remains more subdued in many Northern BC communities** grappling with uneven recoveries in the mining and oil & gas sectors. Even here, however, demand has been resilient, with less volatility of prior commodity cycles. Average home prices in the region are more or less stable amid balanced supply conditions.

**The combination of the new mortgage rules, additional provincial housing taxes, and rising interest rates will likely lead to some softening in home sales this year.**

The Bank of Canada estimates about 12% of potential buyers in Vancouver and surrounding areas are affected by the tougher stress tests. The overall decline in sales, however, is expected to be somewhat smaller, as some potential buyers may choose to purchase lower-priced homes, while others may consider alternative financing options, including extended amortizations, larger down payments, or alternative lenders not subject to the OSFI mortgage guidelines. Average MLS home prices are forecast to post another year of relatively moderate low single-digit increase in 2018, though this in part reflects the continuing compositional shift in sales toward lower-priced dwellings. Benchmark home prices in BC's Lower Mainland and south Vancouver Island, measured by the MLS HPI, are forecast to increase by a stronger 5–10% given tight demand-supply conditions in the row and apartment segments, though this still represents a notable moderation from the 10–25% annual increases seen in 2016–17.

## FUNDAMENTALS UNDERPINNING DEMAND

**Housing demand is underpinned by healthy fundamentals**, including strong economic growth, low unemployment, rising wages, and still-low borrowing costs. BC's annual real GDP growth averaged an impressive 3.5% from 2014–17, about 1½ percentage points above the national pace. The unemployment rate has dropped to near a decade low below 5%. This robust economic performance is expected to cool toward a still reasonably good 2% expansion by 2019.

**Demographic trends also are supportive**, including ageing millennials and increased international and interprovincial in-migration. Net international immigration to BC totaled almost 26,000 in the twelve months to Q4 2017, while the number of non-permanent residents increased by almost 24,000. These inflows are set to climb even higher under Ottawa's increased immigration targets through 2020, and with universities continuing to ramp up international recruitment. About 80–85% of immigrants and non-permanent residents to BC in recent years have settled in Vancouver.

**Interprovincial migration into BC appears to have peaked** as Alberta's strengthening economic and labour market recovery pulls some migrants back into the province, but is expected to remain positive. Net interprovincial inflows totaled just over 10,000 in the twelve months to Q4 2017, the lowest level since 2014 and down from a recent peak of almost 27,000 in mid-2016 (chart 4). In recent years, about one-third of net interprovincial migrants to BC have landed in Vancouver.

Chart 2

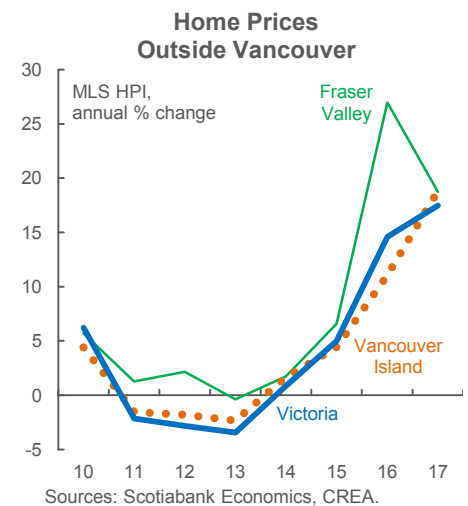
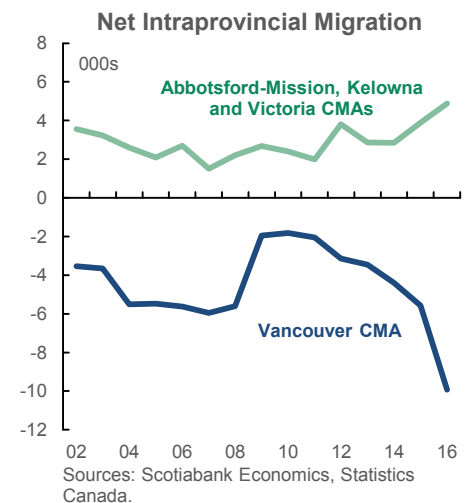


Chart 3



Foreign capital inflows add another demand channel. **Non-resident buyers continue to account for a relatively steady 4% of home purchases in Metro Vancouver** (chart 5), and around 3% of purchases in the province outside Metro Vancouver. To date there is little evidence that the 15% foreign buyer's tax in Metro Vancouver has diverted purchases toward other jurisdictions inside or outside of the province. It remains to be seen if the subsequent increase in the tax to 20% and its expansion beyond Metro Vancouver will have a more significant dampening impact on sales.

### AFFORDABILITY CHALLENGES TO PERSIST

The ongoing erosion in affordability for buyers presents downside risk to BC's relative provincial competitiveness. Mortgage carrying costs as a share of median household income to purchase an average priced home in Vancouver is near its highest level ever at over 65%<sup>1</sup>. Even condominiums are increasingly out of reach for new homebuyers, absorbing more than 40% of median income. Affordability pressures for both first-time and move-up buyers also are building in other parts of the province, primarily in Southern BC, where property values have risen rapidly.

**Affordability is set to deteriorate further in 2018–19 as borrowing costs drift higher.** The Bank of Canada, after raising its policy rate 25 basis points in January, is expected to follow up with two more rate hikes this year and to continue on a gradual tightening path with three more hikes in 2019. The 5-year fixed mortgage rate could increase by 50–100 bps from current levels by the end of 2019 alongside rising bond yields.

This affordability challenge will not be easily resolved. **Average home prices in Vancouver would need to drop by about 25% from current levels in order to bring mortgage carrying costs relative to household income back to its long-term average of around 50%.** Conversely, it would take ten years of stagnant home prices and moderate income growth at prevailing interest rates to arrive at the same result.

Higher interest rates and the latest regulatory changes could slow upward price pressures in the near-term. However, **over the medium- and longer-term, there is a strong likelihood that average home prices in BC's largest urban centres will continue to trend higher, supported by a growing population and rising land costs.**

### GROWING RENTAL DEMAND

**A combination of economic and demographic factors, including high home prices, ageing millennials, downsizing seniors, and increased in-migration, are contributing to growing rental demand.** Between 2011 and 2016, the number of renter households in Vancouver increased by 41,145, almost double the 22,510 increase over the preceding five-year period and easily eclipsing the 28,580 increase in owner-occupiers. The homeownership rate dropped from 65.5% to 63.7% over this period. Homeownership rates also have edged lower in Victoria, Abbotsford-Mission and Kelowna (chart 6).

**The shift away from homeownership has spurred demand in BC's secondary rental market.** Rental condos last year amounted to 54% of Vancouver's purpose-built rental units; in Victoria, their share was a smaller but significant 23%. Yet these units are rarely a viable option for lower-middle class individuals given that average rents on

<sup>1</sup>Our affordability calculation is based on the MLS HPI, and assumes a 20% downpayment, a 25-year amortization, and the discounted 5-year fixed mortgage rate.

Chart 4

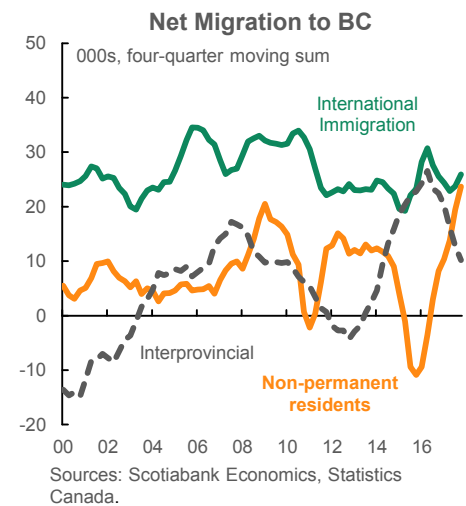


Chart 5

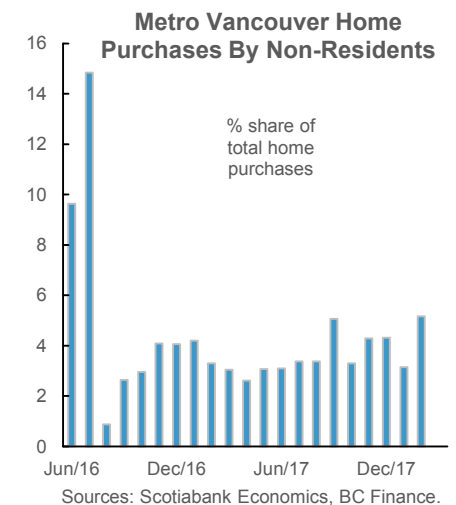
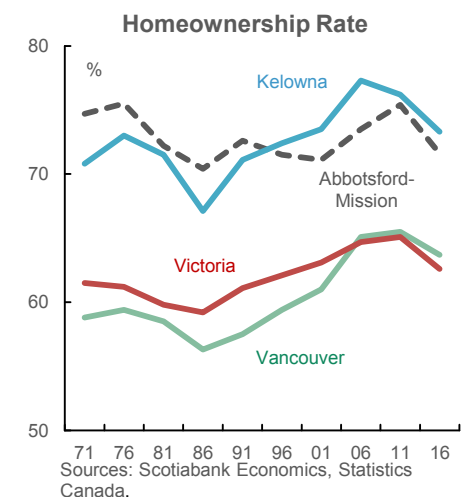


Chart 6



2-bedroom condominium apartments are roughly 20% higher than those of purpose-built rental units in Vancouver and Victoria. A third rental market segment comprises a broad basket of housing types for rent, from single-detached homes to duplexes to “accessory suites”. As of October 2016, this tranche accounted for 41% of the universe of rental units in both Vancouver and Victoria.

**Notwithstanding increased apartment completions, Vancouver’s rental vacancy rate has held at or below 1% since 2014 for both purpose-built rentals and rented condominiums.** Victoria, Abbotsford-Mission and Kelowna report similarly tight vacancy rates below 1% since 2014 and rapidly climbing rents. Even the latter city, known for more modestly rising rents, saw its cumulative post-recession rent increase surpass the national rise by 2016 (chart 7). With rental housing demand expected to remain high in coming years, even more rental supply is required to lift vacancy rates back to more balanced levels of about 3%.

From a shelter cost perspective, renting would appear to be a good alternative to buying. For example, the average monthly carrying cost (including property taxes, insurance and strata fees) to purchase a 2-bedroom condominium in Vancouver is about 50% higher than the average monthly rent for a similar apartment. In Victoria, the purchase premium is about 30%.

**INCREASED NEW HOUSING SUPPLY IN THE PIPELINE**

**Homebuilders are responding to the sustained strength in housing demand and rising new home prices.** Annual housing starts in Vancouver averaged a record 27,000 units in 2016–17. The pickup in activity has been led by multi-units (including the highest level of purpose-built apartment construction since the 1970s), though construction of single-family homes also has increased. A record 42,000 housing units are currently under construction across the Vancouver CMA (chart 8). The Victoria, Abbotsford-Mission and Kelowna CMAs likewise report a record number of new units under development.

**Despite the higher level of new construction, new home supply remains tight.** In Vancouver, the inventory of newly completed and unsold single-family homes is edging up but remains in line with its long-term average, while the inventory of unsold multi-unit homes is near a record low (chart 9). New home inventory also is at historic lows in Victoria, Abbotsford-Mission and Kelowna.

**BUT MORE SUPPLY IS NEEDED**

Annual household formation, a key driver in the demand for new housing, in BC has averaged around 25,000 in recent years (roughly 15,000 renters and 10,000 owners), including about 15,000 in Vancouver. We anticipate a similar level of household formations over the short- to medium-term, with lower net interprovincial migration offset by increased immigration. To meet underlying demographic requirements, housing starts (rental plus ownership) likely need to average around 30,000 annually. The sustainable level of housing starts typically exceeds household formations due to demolitions, second-home purchases and foreign buying activity, all of which effectively remove a housing unit from the existing stock available for new resident buyers (chart 10).

By comparison, **completions last year hit a nine-year high of 31,692**, including 8,879 intended for homeownership, 7,326 purpose-built rentals, and 15,487 condominiums. Completions are expected to rise again in 2018–19. These estimates from CMHC’s

Chart 7

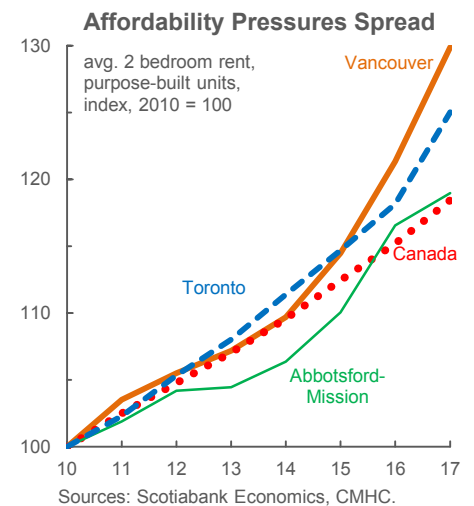
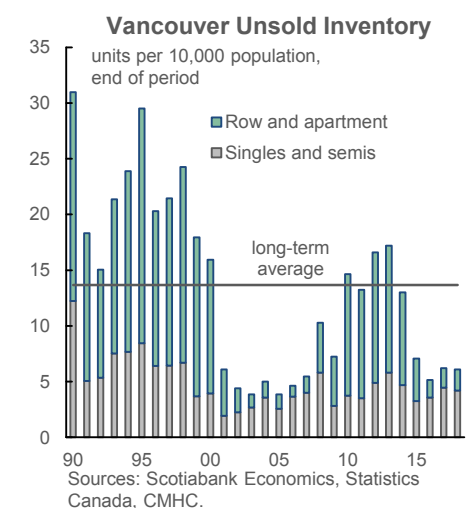


Chart 8



Chart 9



*Starts and Completions Survey* include modular units with a permanent foundation and severed laneway homes, but exclude conversions/alterations within existing structures as well as seasonal dwellings.

The elevated level of completions expected this year and next would appear to be sufficient to meet the new demographic demand emerging each year, but they are not enough to substantively improve current tight supply conditions in the rental and new home markets. An even higher level of completions is needed in the short- to medium-run to move housing supply and rental vacancy rates back toward more balanced conditions, with the majority of the new units being either purpose-built rentals or investor-leased condominiums. It is also critical to target the right mix of dwellings, including more affordable housing options, and more dwellings suitable for families. Much of the recent pickup in construction activity, including purpose-built rentals and condominiums, has been geared to the upper end of the market.

### An Evolving Housing Policy Framework

BC's new NDP government introduced its 30-point *Homes for B.C.* plan as a focal point of its first full *Budget* in February ([here](#)). The *Plan* aims to better align the functioning of its housing markets with BC families' need for an affordable primary residence. The *Plan's* funding is primarily directed to boosting housing supply, particularly across low- to mid-price points, with CAD 6.6 bn to leverage the construction of 114,000 affordable units over the next decade. The *Plan* retains some of the prior administration's measures, discards others and builds on its own initiatives introduced since August 2017.

### FUNDING IS TIGHT

The Province is aiming to sustain balanced books while delivering on its election promise to "make life more affordable" for its residents. Dominating multiple measures are the two priorities of raising the availability and affordability of housing and child care. Despite the urgent shelter needs of low- and middle-income individuals, *Budget 2018* indicates only 31% of its 10-year investment in housing supply will occur from FY18 to FY21. Moreover, the housing *Plan* depends upon expanding partnerships with federal and municipal governments, non-profit entities, social impact and institutional investors and the private sector. This approach capitalizes on BC's existing relationships with non-profits and their patient, longer-term capital, and the sizeable federal funding available under *Canada's National Housing Strategy, 2017*. However, expeditiously establishing alliances and jointly completing projects with partners will be challenging.

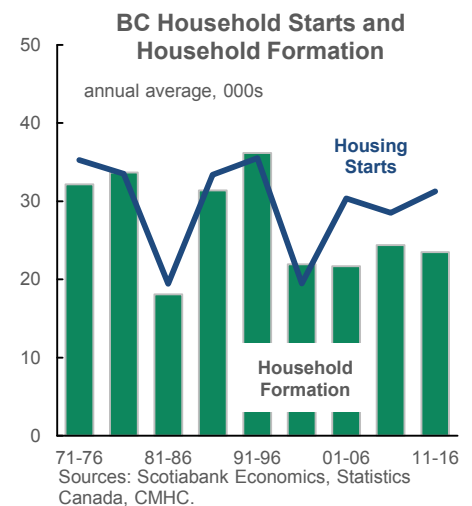
Revenues from some program adjustments will be directly reinvested in housing. For example, the proposed *HousingHub* to facilitate new partnerships and affordable housing initiatives will use funds released from ending, as of March 2018, the *BC Home Owner Mortgage and Equity (HOME) Partnership*. Allowed uses for the Municipal and Regional District Tax (MRDT), collected by municipalities, regional districts and eligible entities such as tourism non-profits, will be expanded to include affordable housing initiatives. The MRDT up to 3.0% and the 8.0% Provincial Sales Tax will be collected on short-term rentals by online accommodation platforms, beginning with Airbnb.

The Property Transfer Tax (PTT) and the provincial school tax will become more progressive. On the portion of a residential property value over CAD 3.0 mn, the general PTT rate climbed from 3% to 5% on February 21. As of 2019, the provincial school property tax will be an additional 0.2% on residential assessed values between CAD 3 and 4 mn, and an extra 0.4% on assessed values exceeding CAD 4 mn.

### PRIORITIZING HOUSING FOR PRIMARY RESIDENCES FOR BC FAMILIES

To help stabilize housing prices and reduce speculation, the foreign buyers tax was raised from 15% to 20% on February 21<sup>st</sup> and expanded to include the Regional Districts of Nanaimo, the Capital, Fraser Valley and Central Okanagan (Kelowna). For roughly the same geographic area, to discourage non-resident and domestic speculation and reduce vacant units in high-priced CMAs, a new annual property tax, labelled a Speculation Tax, is planned as of 2018. It will apply to residential units that are not British Columbians' primary residence, or are not long-term rentals. The rate, from 0.5% on all property values in 2018, will rise to 2.0%

Chart 10



as of 2019 for foreign investors and satellite families. For Canadian citizens or permanent residents, the rate will be 1.0% for non-BC residents and 0.5% for BC residents, with tax credits for declared BC income or if a BC resident's property is a second home.

In the City of Vancouver, the Province's Speculation Tax will supplement the 'Empty Homes Tax' applied by the City to units vacant for more than six months of the prior year. In the first year of Vancouver's Tax, more than 6,300 residential properties were declared vacant in 2017 by their owners, though some owners have requested exemptions. An additional 2,100 homes, with no declaration received from their owners, will be subject to the tax, assessed at 1.0% of a home's value.

Further efforts to achieve transparent real estate markets and curtail fraud and tax evasion include closer tracking of beneficial ownership, stronger provincial tax auditing and enforcement, and a fuller sharing of income tax, homeownership grant and property assessment data with the federal government. Pre-sale flipping, notably in condominium developments, will be curtailed by requiring developers to collect and report comprehensive Purchase and Sale Agreements. The dampening effects of the *Plan's* tax measures on housing demand and turnover is likely to be more evident for higher-priced units where y/y price increases moderated over the past year relative to lower-priced row and apartment units.

### **LOWERING MARKET RENTAL COSTS**

To spur construction of purpose-built rental units at price points for middle- and modest-income households, rental projects qualifying for municipal revitalization property tax exemptions also will be exempt from provincial property tax as of 2019. BC is approaching Ottawa to develop other tools to trim cost barriers for moderate-priced purpose-built rentals. Other measures include allowing strata corporations to impose higher penalties on unit owners offering short-term rentals that disrupt the condominium development for other families.

To support renters, BC is exploring a measure for market renters equivalent to the existing Homeowner Grant that provides a partial rebate for property taxes. In addition to greater protection for displaced renters and owners of manufactured homes, the Residential Tenancy Branch will receive increased funding to improve renter/landlord services and more timely dispute resolution. Rental assistance programs for lower-income Seniors and families renting in the private market will be enhanced this September, with expanded eligibility for families. In the wings is the federal government's proposed *Canada Housing Benefit* that will assist social housing applicants or tenants or low-income households in the private housing market. This *Benefit* is to be delivered by each Province by 2020, but the more effective path is expediting greater supplies of lower-cost market rental units.

Acknowledging the urgency of unmet housing needs, BC proposes several measures to increase near-term, moderate-priced supply. To release existing housing units that post-secondary students are currently renting, provincial funding of CAD 450 mn will provide loans or grants for 5,000 additional student housing beds and another 3,000 beds are anticipated through institutional self-financing or other partnerships. Over the next two years, the Province will allocate CAD 75 mn to help address cost pressures on existing housing projects to ensure the affordability of the completed units. BC is providing CAD 1.1 bn over ten years for social housing refits, with federal cost sharing for social housing maintenance and repair available through Phase 1 of the federal infrastructure plan.

### **BOLSTERING AFFORDABLE RENTAL UNITS**

For its ambitious target of 114,000 additional affordable units, the NDP lost no time setting aside CAD 208 mn in its September 2017 *Update* to build over 1,700 affordable rental units, with the rental income pragmatically covering operating costs and some resident assistance. The February *Budget* for the next three years outlines CAD 445 mn for mixed-income social housing projects, with further funds allocated for specific shelter needs such as new homes for Indigenous peoples. Core housing need assessments and other metrics consistently indicate BC's issues of inadequate housing for lower-income individuals or other vulnerable segments of the population to be among the most acute across the provinces (chart 11). The improvement reported for BC in the 2016 *Census* has likely been reversed by the intensifying pressure on urban housing supplies in the last few years, and reducing this cumulative shortage is undeniably an extended process.

An innovative proposal last September was CAD 0.3 bn for 2,000 modular units for the homeless which can be quickly installed and relocated if necessary. The 24/7 social and staff support service critical for social housing will be provided by non-profit organizations with an initial three-year CAD 0.2 bn budget.

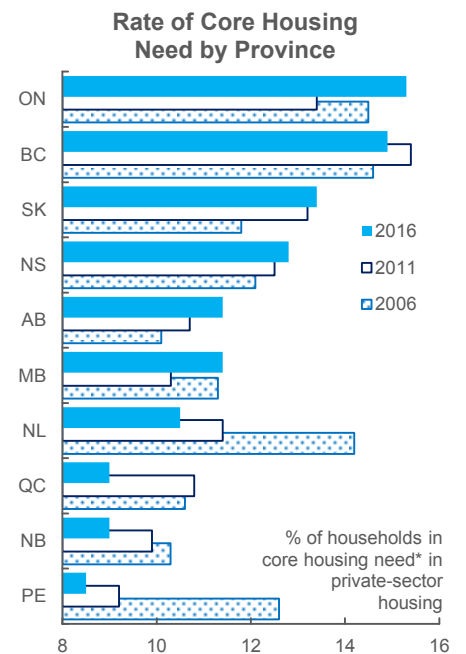
The success of *Homes for B.C.* depends upon proactive municipal government action. But the first step for many communities will be provincially funded housing need assessments over the next three years. Building municipal capacity to address local housing needs and opportunities also is planned, suggesting considerable delays before new tools such as rental zoning are developed and plans implemented for increased density and affordable housing around transit hubs. Streamlining current development approval timelines and costs could offer substantial benefits. As BC moves forward with its capital plans, the integration of affordable housing into the infrastructure planning process could be advantageous.

### A CHALLENGING OUTLOOK

The experience of other global cities underlines the depth of effort and extended time periods necessary to achieve progress in rebalancing housing markets. In addition, British Columbia has several unique challenges, such as Vancouver's land-locked position and the need to protect its limited arable land, as the review of the Agricultural Land Reserve indicates. Adjustments to the government's '*Homes for B.C.*' are inevitable as gaps emerge, such as the need for greater ownership housing for moderate-income residents.

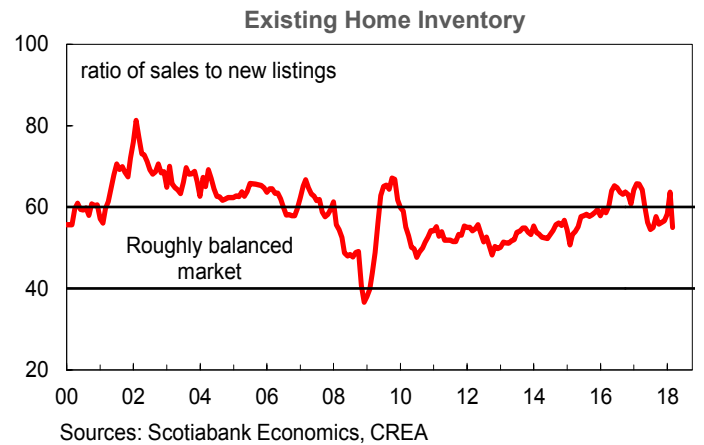
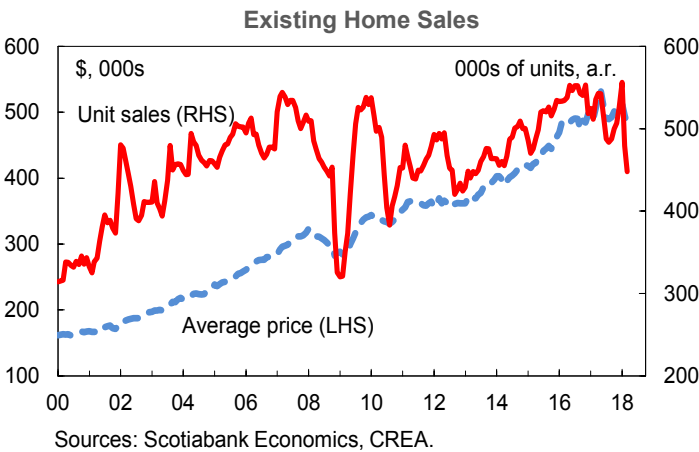
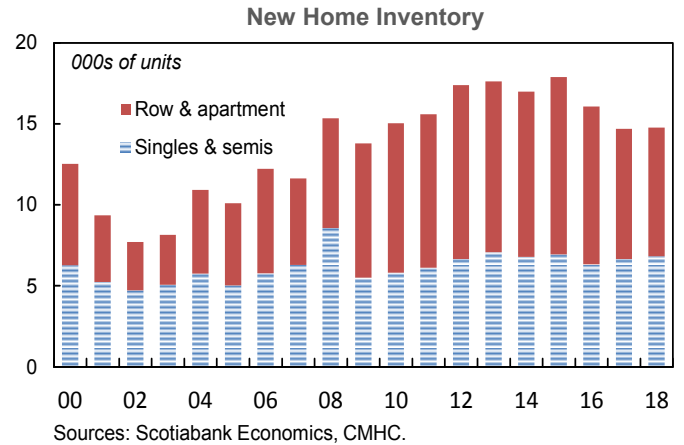
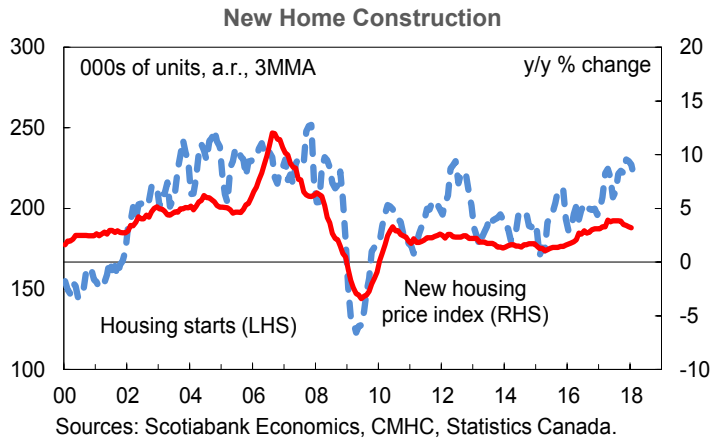
BC's stepped-up funding and its multi-faceted plan are encouraging; and progress in beginning to address the multiple shortfalls in BC's housing supply is anticipated. Over the next few years, our expectation of continuing substantial price appreciation, particularly for moderate- and modest-priced homes could well spur greater urgency and corrective action, particularly in cross-government collaboration, a potentially necessary outcome.

Chart 11



Evaluated on the basis of affordability, adequacy and suitability conditions (see CMHC, [here](#)). Sources: Scotiabank Economics, Statistics Canada, CMHC.

**CANADIAN RESIDENTIAL MARKETS**

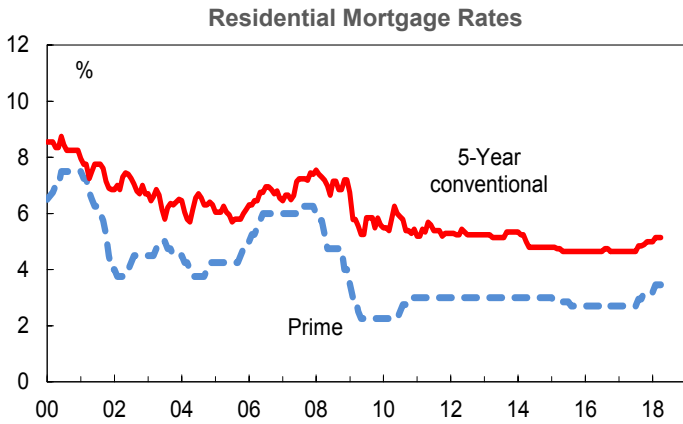


Housing Starts								
	Canada	B.C.	Alberta	Sask.	Manitoba	Ontario	Quebec	Atlantic
<i>(000s units, sa)</i>								
2011	194	26	26	7	6	68	48	13
2012	215	27	33	10	7	77	47	13
2013	188	27	36	8	7	61	38	10
2014	189	28	41	8	6	59	39	8
2015	196	31	37	5	6	70	38	8
2016	198	42	25	5	5	75	39	8
2017	220	44	29	5	8	79	46	9
2018ytd	222	39	25	5	5	96	46	7
2018f	206	42	29	5	6	75	41	8
2019f	196	38	30	5	6	71	38	8
<i>(units, nsa)</i>								
	Vancouver	Calgary	Edmonton	Toronto	Ottawa	Montreal	Halifax	St. John's
2011	17,867	9,292	9,332	39,745	5,794	22,719	2,954	1,923
2012	19,027	12,841	12,837	48,105	6,026	20,591	2,754	2,153
2013	18,696	12,584	14,689	33,547	6,560	15,632	2,439	1,734
2014	19,212	17,131	13,872	28,929	5,762	18,672	1,757	1,230
2015	20,863	13,033	17,050	42,287	4,972	18,744	2,599	985
2016	27,914	9,245	10,036	39,027	5,298	17,834	2,305	833
2017	26,204	11,534	11,435	38,738	7,457	24,756	2,752	763
2018ytd	26,279	8,140	10,461	55,514	4,560	19,546	2,385	641

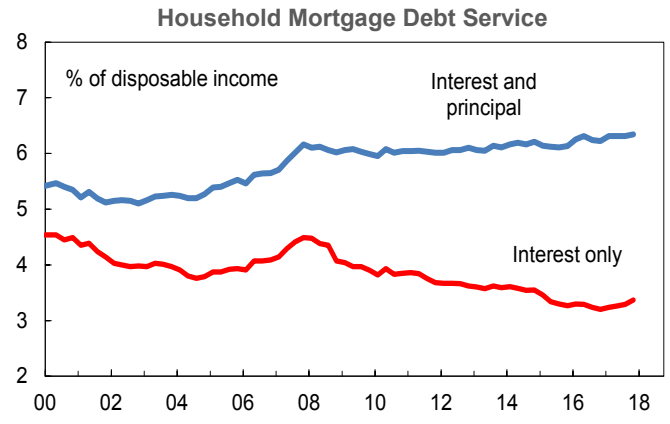
Sources: Scotiabank Economics, CMHC. Year-to-date data are expressed at seasonally adjusted annual rates.



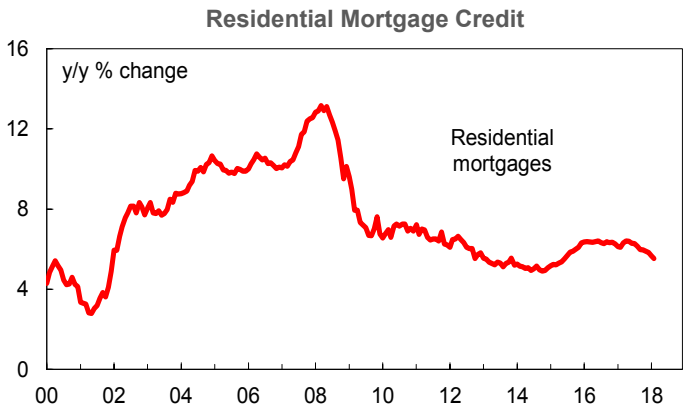
**CANADIAN RESIDENTIAL MARKETS**



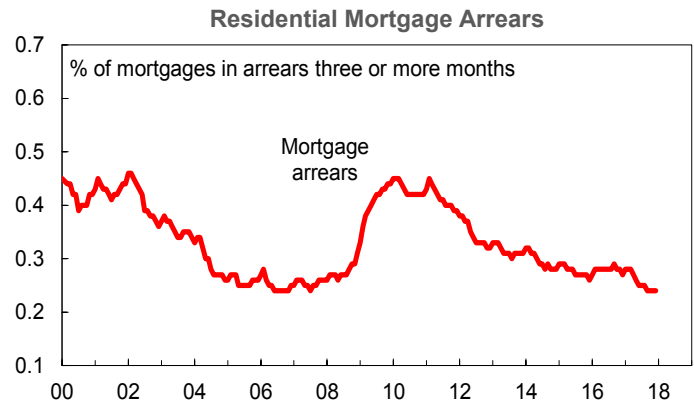
Sources: Scotiabank Economics, Bank of Canada.



Sources: Scotiabank Economics, Statistics Canada.



Sources: Scotiabank Economics, Bank of Canada.



Sources: Scotiabank Economics, CBA.

**Home Sales**

	Canada		British Columbia		Alberta		Man.-Sask.		Ontario		Quebec		Atlantic	
	Avg. Price	Units	Avg. Price	Units	Avg. Price	Units	Avg. Price	Units	Avg. Price	Units	Avg. Price	Units	Avg. Price	Units
2011	362,837	461,317	561,271	76,727	355,333	55,296	249,107	26,680	365,313	201,900	251,138	77,164	201,613	23,107
2012	364,232	455,535	514,849	67,634	365,650	62,197	264,637	27,276	384,668	197,576	260,705	77,372	209,268	23,022
2013	383,431	458,347	537,428	72,936	383,421	67,381	277,048	26,847	403,399	198,151	264,285	71,194	210,335	21,402
2014	408,510	484,536	568,391	84,054	402,334	75,087	284,939	27,257	431,146	206,122	267,916	70,620	209,878	20,938
2015	442,768	510,655	636,607	102,514	395,470	59,296	285,035	26,040	464,465	226,165	271,791	74,121	208,588	22,018
2016	489,839	540,732	691,111	112,211	396,516	54,798	287,476	25,894	534,677	245,384	279,832	78,144	206,441	23,691
2017	510,008	516,188	709,563	103,767	398,130	57,166	290,146	25,487	585,212	221,915	292,545	82,572	211,596	24,605
2018ytd	488,676	463,710	715,447	92,664	396,206	57,726	290,149	24,972	559,332	181,248	302,456	81,852	217,894	24,708

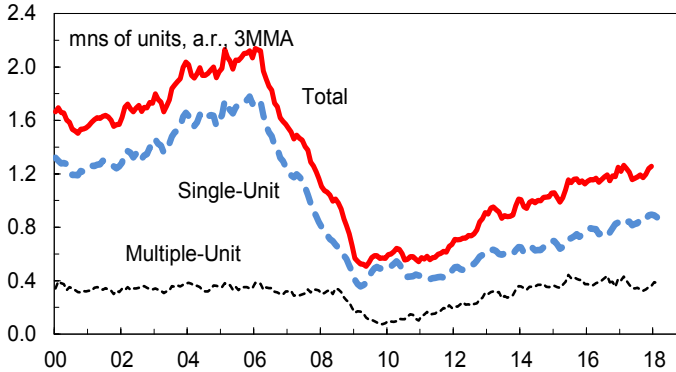
  

	Vancouver		Calgary		Edmonton		Toronto		Ottawa		Montreal		Halifax	
	Avg. Price	Units	Avg. Price	Units	Avg. Price	Units	Avg. Price	Units	Avg. Price	Units	Avg. Price	Units	Avg. Price	Units
2011	779,730	32,936	402,851	22,466	333,624	17,916	466,352	91,760	344,496	15,059	304,805	41,672	261,125	6,082
2012	730,063	25,445	412,315	26,634	344,699	19,160	498,973	88,157	352,199	14,692	316,630	41,491	272,468	6,194
2013	767,765	28,985	437,036	29,954	354,599	20,560	524,089	88,946	358,592	14,013	319,548	37,764	275,788	5,147
2014	812,653	33,693	460,584	33,615	372,891	22,923	566,491	93,278	362,525	14,122	326,539	36,917	276,715	4,811
2015	902,801	43,145	453,814	23,994	379,516	20,870	622,046	101,846	368,521	14,849	332,496	39,210	286,127	4,896
2016	1,017,228	40,880	463,047	22,522	378,743	19,443	729,591	113,725	374,649	15,616	344,509	41,309	290,910	5,232
2017	1,031,546	36,604	466,259	23,869	380,000	19,540	823,874	93,158	394,311	17,311	364,510	44,448	296,182	5,581
2018ytd	1,027,696	30,186	469,066	22,764	377,747	20,532	757,863	75,858	400,983	15,246	380,130	44,646	309,500	5,610

Sources: Scotiabank Economics, CREA, QFREB. Year-to-date data are expressed at seasonally adjusted annual rates.

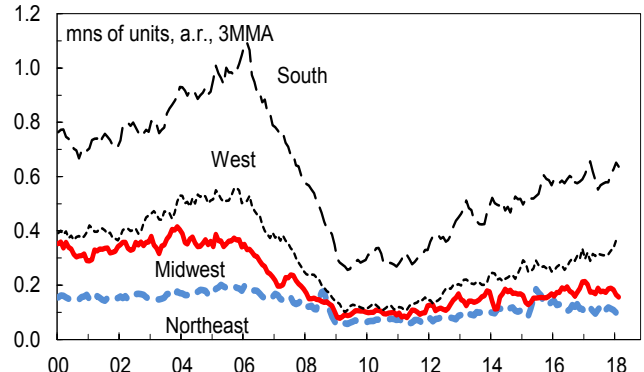
**US RESIDENTIAL MARKETS**

**Housing Starts**



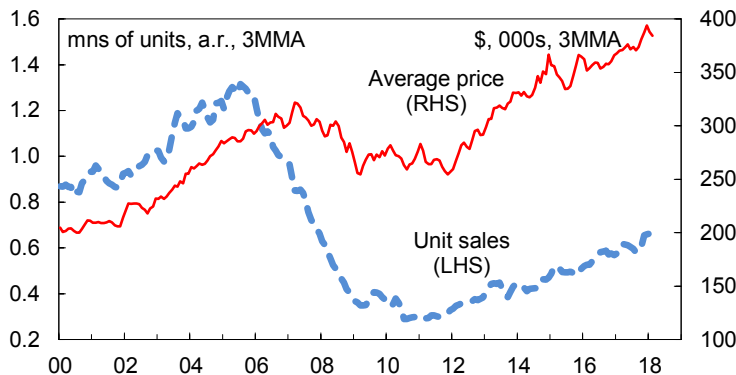
Sources: Scotiabank Economics, US Census Bureau.

**Housing Starts by Region**



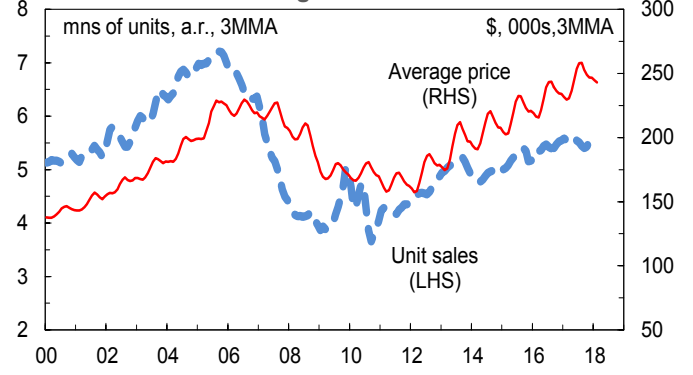
Sources: Scotiabank Economics, US Census Bureau.

**New Home Sales**



Sources: Scotiabank Economics, US Census Bureau.

**Existing Home Sales**



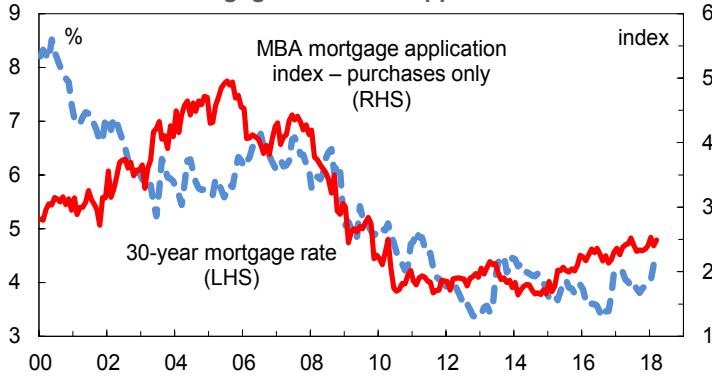
Sources: Scotiabank Economics, National Association of Realtors (NAR).

	Housing Starts								Permits		
	Total	Singles	Multis	West	South	Midwest	Northeast	Total	Singles	Multis	
	<i>(millions of units)</i>								<i>(millions of units)</i>		
2011	0.609	0.431	0.178	0.133	0.308	0.101	0.068	0.624	0.418	0.206	
2012	0.781	0.535	0.245	0.175	0.398	0.128	0.080	0.830	0.519	0.311	
2013	0.925	0.618	0.307	0.215	0.464	0.150	0.097	0.991	0.621	0.370	
2014	1.003	0.648	0.355	0.235	0.496	0.163	0.110	1.052	0.640	0.412	
2015	1.112	0.715	0.397	0.266	0.556	0.153	0.138	1.183	0.696	0.487	
2016	1.174	0.782	0.392	0.291	0.585	0.182	0.116	1.207	0.751	0.456	
2017	1.203	0.849	0.354	0.313	0.599	0.179	0.112	1.264	0.817	0.447	
2018ytd	1.283	0.890	0.393	0.364	0.658	0.150	0.111	1.338	0.875	0.463	
2018f	1.260										
2019f	1.300										

Sources: Scotiabank Economics, US Census Bureau. Year-to-date data are expressed at seasonally-adjusted annual rates.

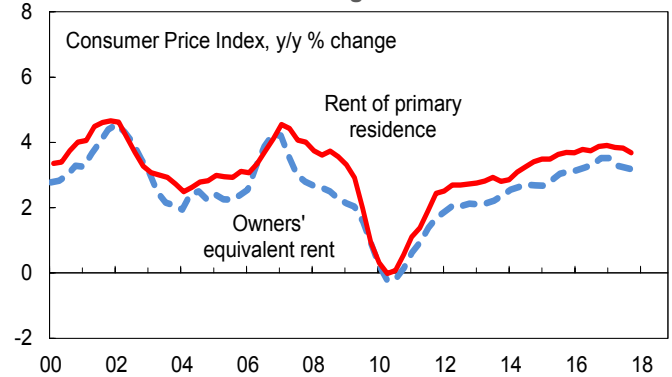
**US RESIDENTIAL MARKETS**

**Mortgage Rates and Applications**



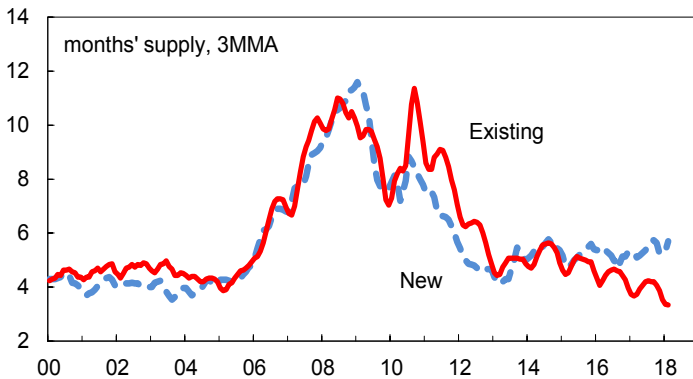
Sources: Scotiabank Economics, Mortgage Bankers Association (MBA), FHLMC.

**Housing Costs**



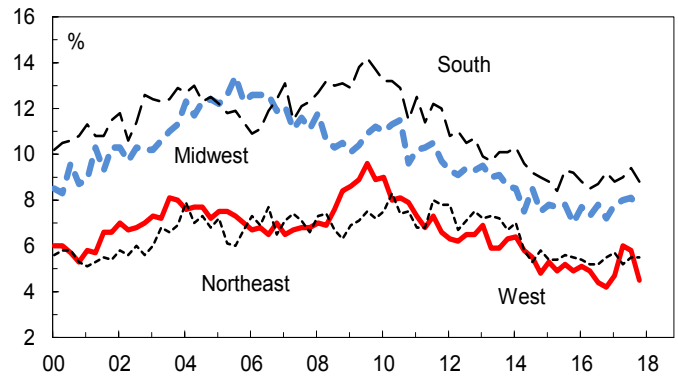
Sources: Scotiabank Economics, US Bureau of Labor Statistics.

**New and Existing Home Inventories**



Sources: Scotiabank Economics, US Census Bureau, National Association of Realtors (NAR).

**Apartment Vacancy Rates**



Sources: Scotiabank Economics, US Census Bureau.

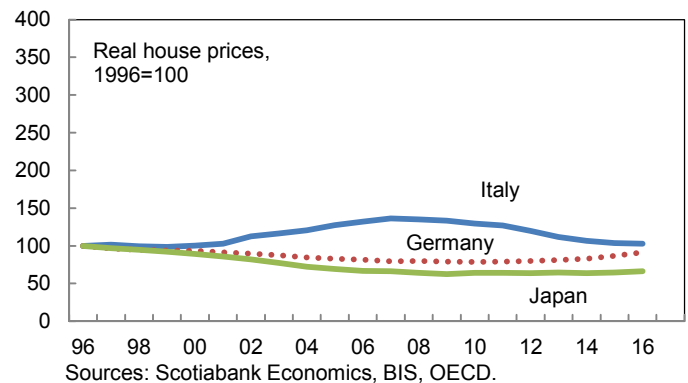
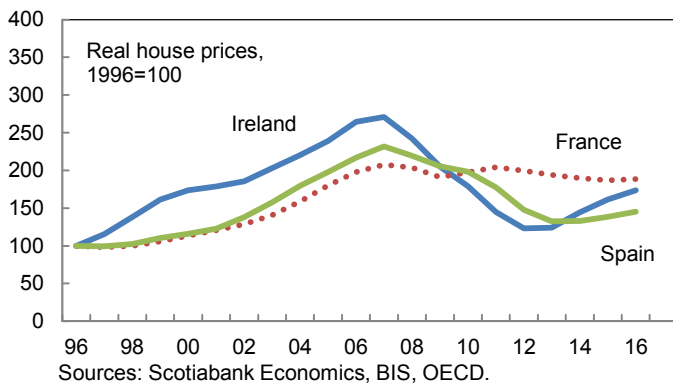
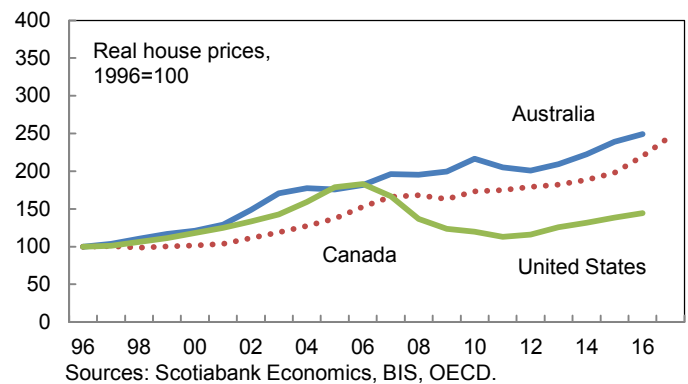
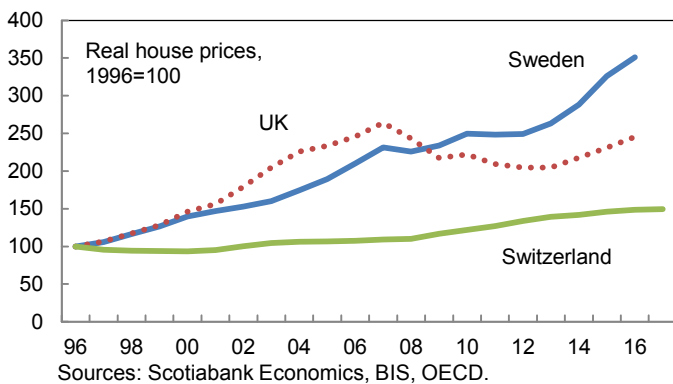
	Existing Home Sales							New Home Sales		
	Total	Avg Price	Months' Supply	West	South	Midwest	North East	Total	Avg Price (\$000s)	Months' Supply
	(sa)	(nsa)	(nsa)							
	<i>(million units, saar, unless otherwise noted)</i>									
2011	4.260	214.0	8.3	1.130	1.680	0.910	0.540	0.306	263.4	6.6
2012	4.660	225.4	5.9	1.160	1.840	1.070	0.590	0.368	285.4	4.8
2013	5.090	245.5	4.9	1.190	2.050	1.200	0.660	0.430	319.3	4.7
2014	4.940	255.3	5.2	1.100	2.050	1.140	0.640	0.440	341.8	5.5
2015	5.250	266.4	4.8	1.170	2.160	1.240	0.700	0.503	348.6	5.2
2016	5.450	276.0	4.4	1.190	2.220	1.300	0.740	0.561	359.3	5.2
2017	5.510	289.2	3.9	1.220	2.260	1.300	0.740	0.617	377.5	5.4
2018ytd	5.460	281.9	3.4	1.205	2.335	1.235	0.685	0.620	376.9	5.9

Sources: Scotiabank Economics, National Association of Realtors (NAR), US Census Bureau.  
Year-to-date data are expressed at seasonally-adjusted annual rates.

**INTERNATIONAL RESIDENTIAL MARKETS**

International House Prices													
(Inflation-adjusted, y/y % change)													
	2009	2010	2011	2012	2013	2014	2015	2016	2017	17Q1	17Q2	17Q3	17Q4
Australia	2.2	8.5	-5.3	-2.1	4.1	6.4	7.4	4.2	---	7.9	8.1	6.4	---
Canada	-3.2	6.2	0.9	2.4	1.8	3.4	4.9	11.2	12.0	15.0	16.2	9.9	7.5
France	-6.3	3.2	3.6	-2.4	-2.7	-2.1	-1.5	0.9	---	1.6	2.5	3.6	---
Germany	-0.7	-0.6	0.5	1.0	1.7	2.2	4.3	5.5	---	3.7	3.5	4.2	---
Ireland	-15.4	-12.5	-19.2	-14.9	0.7	16.3	11.8	7.4	---	8.8	10.3	11.6	---
Italy	-1.3	-2.9	-2.0	-5.7	-6.9	-4.6	-2.6	-0.7	---	-1.5	-1.7	-1.9	---
Japan	---	2.2	0.3	-0.8	1.3	-1.2	1.6	2.3	---	3.6	1.6	1.9	---
Spain	-6.3	-3.5	-10.5	-16.8	-10.4	0.5	4.1	4.8	---	2.5	3.5	4.9	---
Sweden	3.5	6.8	-0.4	0.3	5.5	9.6	13.2	7.6	---	5.1	6.7	5.2	---
Switzerland	6.2	4.2	4.2	5.2	4.2	1.8	3.1	1.6	0.8	1.2	1.5	0.3	0.0
United Kingdom	-10.8	2.3	-5.7	-2.3	0.0	6.5	5.9	6.3	---	2.2	1.7	2.0	---
United States	-9.6	-2.8	-5.7	2.6	8.3	4.7	5.4	4.1	---	3.0	4.0	4.4	---
Russia	-10.9	1.3	-27.0	9.5	-2.7	-6.0	-12.3	-11.6	---	-8.4	-7.6	-6.7	---
Brazil	19.4	19.0	11.6	6.1	2.8	0.2	-8.0	-10.3	---	-6.8	-5.5	-4.5	---
Chile	1.5	6.0	2.0	2.1	6.1	1.8	4.7	-1.2	---	0.2	-0.5	---	---
Colombia	4.9	5.5	4.3	7.1	7.6	5.0	4.4	4.1	---	2.9	2.7	3.7	---
Mexico	0.1	-0.3	0.8	0.7	0.0	0.4	3.8	5.1	---	0.2	0.7	-3.3	---
Peru	14.0	9.3	13.2	17.5	13.7	9.2	2.6	2.4	---	-7.5	-2.7	-5.2	---
China	1.9	5.4	-1.2	-3.2	3.2	0.6	-5.2	4.5	---	9.2	8.3	6.0	---
India	---	8.5	11.3	15.5	7.8	7.8	8.3	1.6	---	6.6	6.4	4.2	---
Indonesia	-2.7	-2.2	-0.7	0.6	5.3	0.6	-0.8	-0.4	---	-1.0	-1.1	-0.5	---
South Korea	-2.5	-0.5	1.2	0.7	-1.7	0.2	2.6	1.7	-0.6	-0.8	-0.7	-0.8	-0.2
Thailand	6.1	-0.5	0.5	0.3	5.5	3.8	3.5	1.2	-0.6	-1.8	-3.2	-0.2	3.1

Sources: Scotiabank Economics, Bank for International Settlements



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