

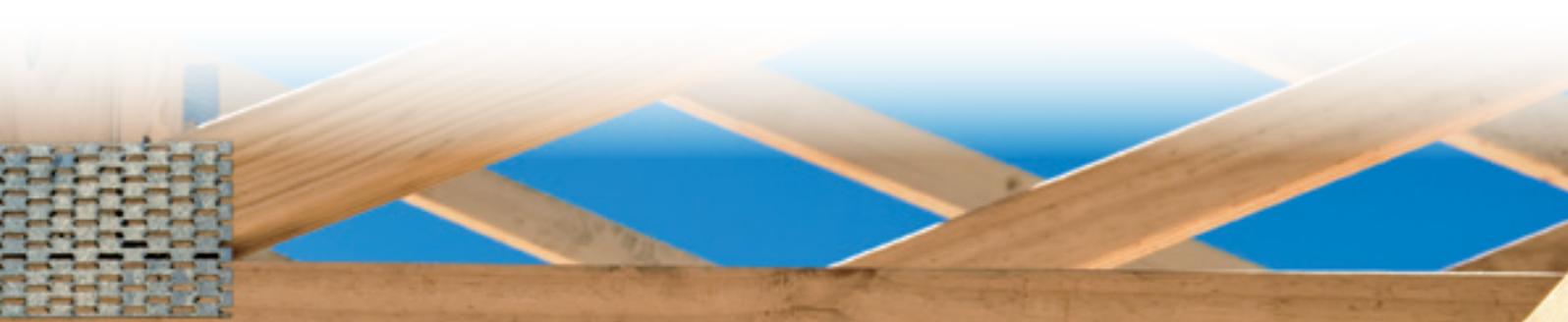
11 HOUSING AND CONSTRUCTION MARKETS

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HIGHLIGHTS

- The UNECE region's economic recovery has been sluggish; national income in more than half of the region's countries has yet to return to 2008 levels and unemployment remains high.
- Numerous risks remain that could endanger even moderate growth in 2014 and beyond as the eurozone crisis appears to be deepening.
- Further deterioration in the eurozone or an economic downturn in a major country might have significant implications not only for the European Union but also for the global economy.
- The European housing construction market is still stagnant due to the ongoing sovereign debt crisis, a recession in several countries and the lingering effects of the collapse of the Spanish and Irish housing markets. Growth estimates are negative for new housing and remodelling in 2013 - with improvement in new housing not expected until 2014 at the earliest.
- Uncertainties about the sovereign debt crisis and a lack of confidence in several European countries, in addition to increasing unemployment, low consumer sentiment, tightened loan requirements and adverse income prospects, have contributed to the unstable performance of the European housing markets. This may hinder a robust housing recovery in Europe.
- The United States housing market is improving; yet, to place things in perspective, housing starts remain at historically low levels.
- United States home prices are increasing year on year; the Standard & Poor's 10- and 20-City Composites have increased 10.3% and 10.9%, respectively.
- North American building material demand and prices have increased substantially from their 2010 levels. Canadian and United States forest-product exports are stable, particularly due to Chinese imports. North American forest-product firms also are benefitting from the improving United States housing market.
- Canada's economic fundamentals slowed in late 2012 and this trend is expected to continue into 2013. Forecasts suggest modest housing demand, with a resulting decline in housing starts in 2013.



11.1 BRIEF OVERVIEW OF THE ECONOMIC SITUATION IN THE UNECE REGION IN 2012-2013

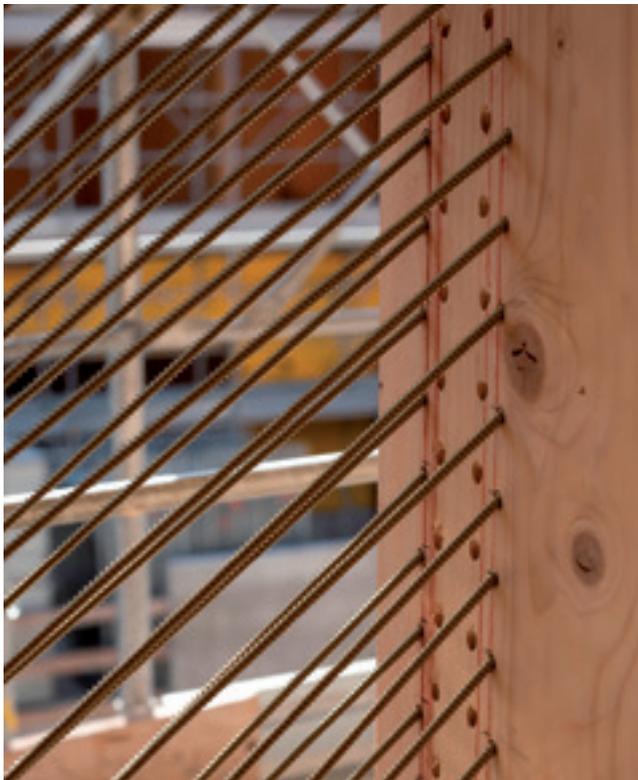
Prospects are uneven for the UNECE Region. According to the World Bank (2013), the global economy is transitioning into what may be a smoother and less volatile period. In the developed and high-income countries such as in Europe, growth is being restrained by weak consumer and business confidence, along with continued banking-sector and fiscal restructuring. In the United States, the economy is improving incrementally. However, a private-sector recovery may be negatively affected by fiscal tightening from State and Federal Governments.

The World Bank estimates the world's 2012 gross domestic product (GDP) growth at 2.3% and forecasts a 2.2% increase for 2013. The projections are 3.0% for 2014 and 3.3% for 2015.

In the US, GDP growth for 2012 was 2.2%; with an estimate of 2.0% for 2013 and projections of 2.8% for 2014 and 3.0% for 2015.

The eurozone is struggling and future projections are weak: -0.5% for 2012; an estimate of -0.6% for 2013; and 0.9% for 2014 and 1.5% for 2015.

The prospects for the Russian Federation's economy are brighter, with an estimated GDP growth of 3.4% in 2012 and 2.3% for 2013. Projections for 2014 are 3.5% and 3.9% for 2015.



Source: proHolz Austria, 2013.

11.2 EUROPEAN CONSTRUCTION MARKET

11.2.1 Review and outlook

Overall, the European¹¹ housing market is at best stagnant and is "strongly influenced by macroeconomic events" (Euroconstruct, 2012; 2013). It's affected by prior overbuilding, chronic unemployment in several countries; low consumer sentiment, and the sluggish economy in member countries.

For instance, Spain's overbuilding led to a housing crash, which has become a drag on the economy and on other countries' construction sectors. Prospects for the subregion's housing markets have been revised downwards from previous forecasts. This is in part a result of the downgrading in the region's current and future GDP. New housing starts are not projected to reach the symbolic 1.5 million units until well after 2015.

In addition, within this modest projection, over 70% of the construction is expected to occur in five countries: Germany, France, Italy, the United Kingdom, and Spain. Countries projected to have a positive construction outlook in 2013 are Norway, Germany, United Kingdom, Austria, Switzerland and Belgium. However, only Germany and the United Kingdom are estimated to have robust construction markets through to 2015. In 2013 significant construction decreases are estimated for Spain, Portugal, Ireland and the Czech Republic (Euroconstruct, 2013). Allen (2013) reports that construction conditions don't seem to be improving, as construction decreased by 7.9% and by 7.2% in the EU27 from March 2012 to March 2013.

Remodelling garnered the largest share of construction activity in 2012, nearly 61% of the total. In Eastern Europe, about 66% of building activity is new construction, versus nearly 33% in Western European countries (Euroconstruct, 2013). The percentage of remodeling is projected to increase steadily in future years, due to government support as compared to new construction, where larger financial capital requirements and longer timeframes for new construction are typically required.

11.2.2 European construction trends

11.2.2.1 New housing

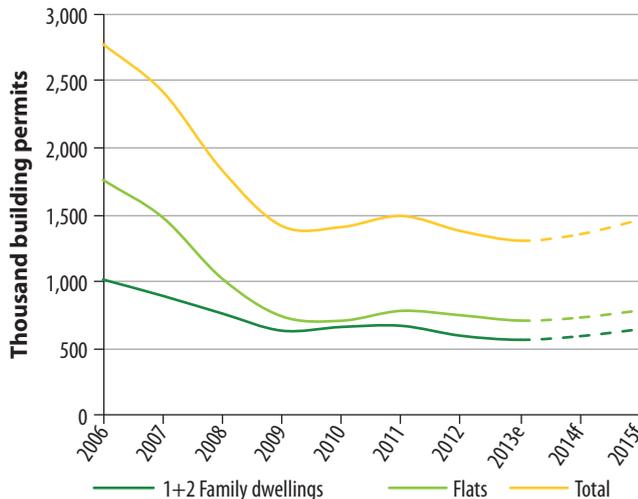
Housing permits and starts are minimal in the Euroconstruct region and are substantially below the numbers recorded in the early 2000s (graphs 11.2.1 and 11.2.2). Again, economic

¹¹ Housing and construction data for Europe refer to Euroconstruct data and its geographical coverage. The Euroconstruct report comprises the following 19-countries: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom. Euroconstruct bases its analysis of eastern European construction on 4 of these: Czech Republic, Hungary, Poland and Slovakia.

conditions are the principal hindrances to a robust housing recovery. A record 2.77 million homes were permitted in 2006, and in 2012, 1.38 million units were authorized - a 50.3% decrease.

GRAPH 11.2.1

Euroconstruct-region building permits, 2006-2015

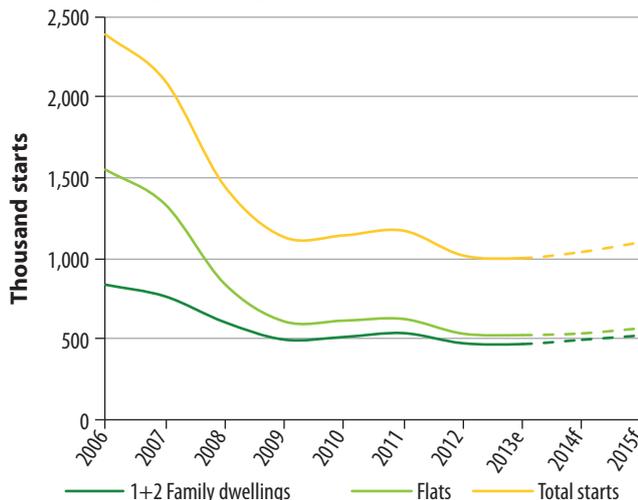


Note: 2013 is an estimate, 2014 and 2015 are Euroconstruct forecasts.
Sources: Euroconstruct, 2013.

The projections are for 565,000 single- and multi-family and 709,200 apartments to be built in 2013. Forecasts for 1+2 family dwellings and flats are not expected to approach 2006 levels in the foreseeable future. The notable exception to these forecasts is Germany, which is the recipient of private capital inflows that are being directed to the real estate construction and housing markets (Euroconstruct, 2012; 2013).

GRAPH 11.2.2

Euroconstruct-region housing starts, 2006-2015



Note: 2013 is an estimate, 2014 and 2015 are Euroconstruct forecasts.
Sources: Euroconstruct, 2013.

In 2013, the value of construction is estimated to be less than in 2012, a 3.2% decrease, with gains of 2.2% projected for 2014 and 4.0% for 2015. Projections for housing renovation are expected to improve, but only in small increments: for 2014 (0.4%) and 2015 (1.3%) as contrasted with 2012. Historically, renovation and home remodelling has been steady, as home renovation and remodelling have been supported by government programmes (Euroconstruct, 2013).

11.2.2.2 Non-residential buildings and civil engineering

Europe is in a period of financial consolidation that may last for some time. Budget reductions, combined with cuts in business, government and personal spending, and deleveraging are having a substantial negative effect on construction demand. Non-residential construction represents the second largest construction subsector; the housing sector is the largest. In 2012, non-residential construction was nearly 33% of all construction activities, and as a comparison, housing and civil engineering were 45% and 22%, respectively. Germany, the United Kingdom, France, Italy and Spain were the five largest non-residential markets in 2012 (Euroconstruct, 2013).

New non-residential construction activities for all building sectors declined by 3.3% in 2012 - and are projected to decrease another 2.6% by 2015. The 2012 amount is 20% less than 2008, adjusted for inflation. The decrease is evidenced by contrasting new residential, non-residential building, civil engineering, and residential remodelling (graph 11.2.3). Given the present economic environment, the educational, warehouse, agricultural, commercial, health, office and miscellaneous non-residential building sectors are forecast to decrease until 2015. Only the industrial construction subsector is projected to increase - by 1.9% in 2015 (Euroconstruct, 2013).

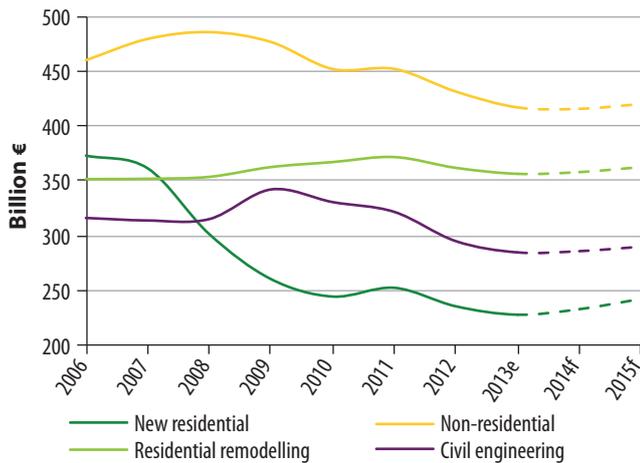


Source: proHolz Austria, 2013.

Residential remodelling is projected to be the driver for all construction sectors in the near term, increasing to €362.3 billion (\$484.6 billion) by 2015, from €361.5 billion (\$470.4 billion) in 2012. Non-residential construction values are predicted to decrease 2.8%, from €431.4 billion (\$561.4 billion) in 2012 to billion €419.7 billion (\$546.2) in 2015 (Euroconstruct, 2013).

GRAPH 11.2.3

European construction spending, 2006-2015



Note: 2013 is an estimate, 2014 and 2015 are Euroconstruct forecasts.

Sources: Euroconstruct, 2013.

Civil engineering activities have, on the whole, decreased since 2009. Civil engineering spending varies greatly from one country to another. This sector is predicted to continue to decrease by 1.5% from €294.7 billion (\$383.5 billion) in 2012, to €289.6 billion (\$376.8 billion) by 2015. Civil engineering is particularly vulnerable to budget allocations, and projections are for slow, if any, growth (Euroconstruct, 2013).

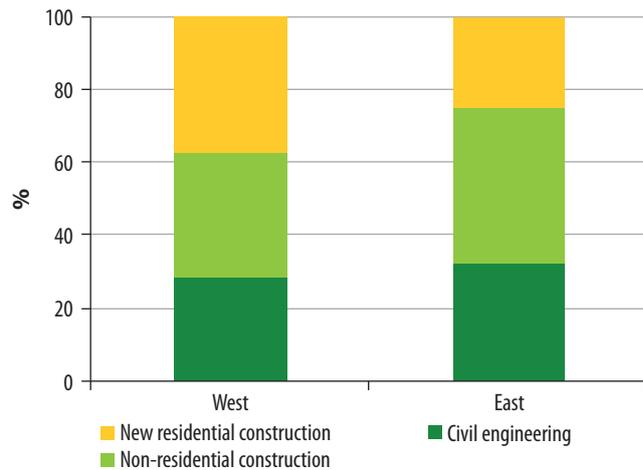
11.2.2.3 Construction-sector shares and growth: Western versus Eastern Europe

In Western Europe, total residential construction is predicted to increase from €577.8 billion (\$751.9 billion) in 2012 to €585.3 billion (\$761.7 billion) by 2015. Residential construction's projected share is expected to consolidate through 2013 and then increase in 2014 and 2015 in the western countries. The four Eastern European countries covered by Euroconstruct are projected to decrease from €19.0 to €18.9 billion (\$24.7 billion to 24.6 billion) (Euroconstruct, 2013).

A significant change in the distribution of construction across sectors occurred in Western Europe, as compared with the period from 2006 to 2011, with less money being directed to the civil engineering sector. This is most likely due to two factors, decreased budgets and builder restraint. Eastern Europe's spending emphasis is directed towards new civil engineering and new non-residential construction (74.9%) (graph 11.2.4) (Euroconstruct, 2013).

GRAPH 11.2.4

Euroconstruct region sector shares for new construction, 2012



Sources: Euroconstruct, 2013.

11.2.2.4 European construction materials

The current, stagnant and depressed, housing market in Europe is undoubtedly having negative consequences for the forest products sector. There are significant differences in the quantity of wood used in the construction of European dwellings, with an average of only 8-10% built with timber frame construction, but ranging up to 45% in the northern European area and 70% in Scotland. This is in contrast to North America, where 90% of homes are built with timber frames (CEI-Bois, 2010). Estimates for wood contained in the average dwelling in Europe are quite low at less than one m³ per housing unit (UNECE/FAO, 2012).



Source: proHolz Austria, 2013.

Italy, like other countries in Europe, has seen an increase in the use of wood for the construction of housing. While still modest, it has grown from 1,223 new residential buildings in Italy in 2006 to 5,005 new buildings in 2010 and is forecast to increase to almost 8,000 in 2015. Since the destructive earthquakes in Abruzzo in 2009, the share of cross-laminated timber, which is very resilient to failure in earthquakes, was as high as 41% in new construction (Gardino, 2011).



Source: proHolz Austria, 2013.

Despite the relatively low volume of wood used in individual European homes, the total volume of wood consumed is still very important, when all residential consumption is taken together. In addition, wood construction is gaining in popularity in Europe, with promotion from government agencies, industry associations and green building advocates. Cross-laminated timber along with other engineered wood products has also opened up new opportunities for wood that were until recently not available.

11.3 COMMONWEALTH OF INDEPENDENT STATES CONSTRUCTION MARKET, WITH A FOCUS ON THE RUSSIAN FEDERATION

11.3.1 Housing construction in the Russian Federation

Housing completions in the Russian Federation have reached record levels. In 2012, 826,800 new dwellings were built, totalling 65.2 million m² (for more information see section 5.3.3 of chapter 5) of residential space (lambla, 2013). This exceeded 2011, when 786,000 units were built (Russian Federation Federal State Statistics Service, 2013). As compared with 2008 levels, the 2012 housing data indicated a 5.2% increase in the quantity of new homes built and a 1.8% increase in floor area (lambla, 2013).

The average housing area per resident is estimated to have increased from 22 m² at the end of 2008 to about 23.4 m² at the end of 2012. In comparison with the early 1990s, per capita housing space has increased by almost 7 m². At 23.4 m², the Russian Federation's per capita housing area is still much smaller than that of most European countries, where the average is more than 30 m² (lambla, 2013).

In the first quarter of 2013, the Russian Federation commissioned 126,100 apartments with a total area of 10.4 million m² and individual developers built 39,700 residential buildings with a total area of 5.3 million m². In comparison, in the first quarter of 2012, 9.8 million m² of housing were commissioned (Russian Federation Federal State Statistics Service, 2013).

The use of wood in home construction is increasing in Russian Federation. In 2002, just 2.2% of homes were classified as having wood structures. This figure grew steadily to 7.1% of homes in 2012 (see chapter 5 for more information).

11.4 NORTH AMERICAN CONSTRUCTION MARKET

11.4.1 United States housing market improving

The US housing market is in the stage of early recovery. For instance, in May 2013 housing permits were at a seasonally annualized adjusted rate (SAAR) of 974,000; 20.8% more than in 2011 (US Census, 2013a).

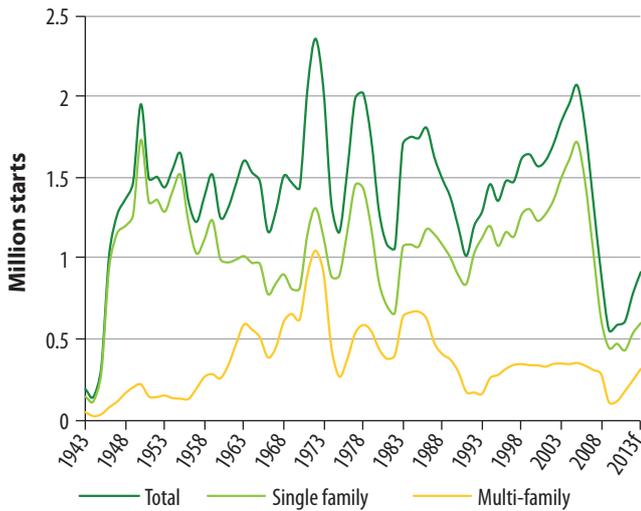
However, to place things in perspective, single-family housing starts (graph 11.4.1) currently are less than the 1946 level and less than in the crash year of 2008. According to Standard & Poor's/Case-Shiller home price indices (2013), US home prices increased year on year. The 10- and 20-City Composites increased 10.3% and 10.9%, respectively, and prices are now at mid-2003 levels (Standard & Poor's, 2013). Most estimates, including the Federal Housing Finance Agency (2013), project that a moderate to robust housing recovery is still several years away.

New US house sales also indicate improvement. In April 2013, new house sales increased to a SAAR of 454,000, a level not witnessed since 2008. This volume of new house sales is similar to 1966, 1969, and 1981-1982. The median new house sale price was \$271,600, 8.3% more than in April 2012 (US Census, 2013b).

Also in April 2013, existing home sales were 4.97 million (SAAR) and the median existing house sales price was \$192,800, which was 9.7% higher than in April 2012 (National Association of Realtors, 2013).

GRAPH 11.4.1

US housing units and starts (SAAR), 1943-2013



Note: f=forecast (May 2013 data). SAAR=Seasonally Annualized Adjusted Rate.

Sources: US Census, 2013a.

In the US, other factors affecting new house construction and forest-product use include existing houses that are underwater, delinquent or shadow inventory houses. As of May 2013, Lender Processing Services (2013) reported that about 3.3 million home loans were at least 90 days delinquent and RealtyTrac® (2013) reported 1.36 million properties were in the pipeline for foreclosure.



Source: APA, 2013.

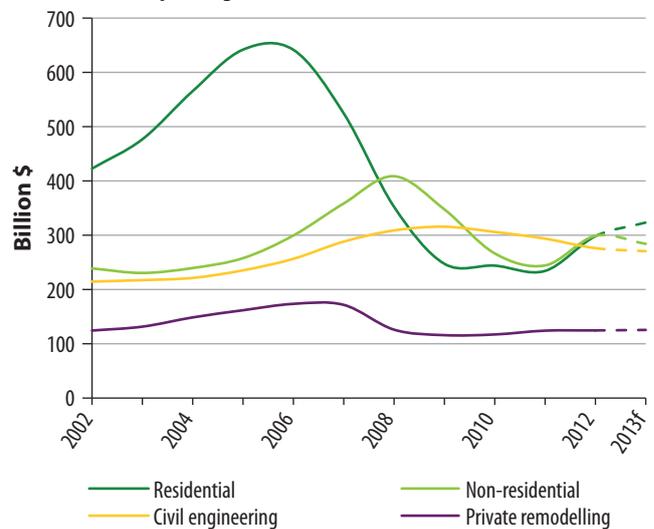
Underwater homeowners owe more on their mortgage than the home's current appraised value (negative equity) and it is currently estimated that between 9 million (Lender Processing Services, 2013) and 11 million owners are underwater (RealtyTrac®, 2013). The "shadow" inventory continues to affect consumer psychology and potentially prices and sales as these homes have been foreclosed on by the lender but have not been listed for sale on the market. The shadow inventory estimate for June 2013 was 7.4 million units (Joint Center for Housing Studies, 2013a).

11.4.2 United States construction outlook

Housing construction spending is incrementally improving (graph 11.4.2), as total private residential construction spending increased 23.1% year on year from May 2012 to May 2013, to \$318.5 billion (SAAR). Single-family construction spending increased 26.7% year-over-year, to \$166.3 billion (SAAR). This is important, as single-family homes consume more wood products than other housing subsectors, such as multi-family or manufactured homes. Housing improvements or remodelling spending increased 3.3% year-over-year to \$124.2 billion (SAAR) in May 2013 (US Census, 2013b). The Leading Indicator of Remodeling Activity (US Census, 2013b) projects that \$148 billion will be spent on remodelling in 2013, an increase of 0.2% from 2012.

GRAPH 11.4.2

US construction spending, 2002-2013



Note: 2013f (May 2013 data).

Source: US Census, 2013c.

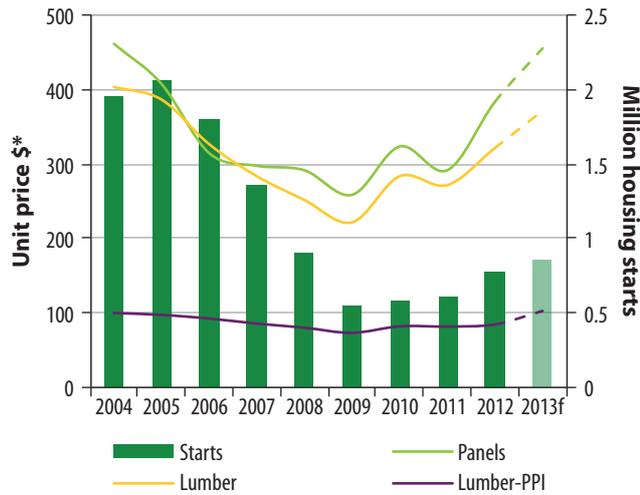
Even with an improving market, a robust housing recovery might be hindered by, for instance, increasing delinquencies, foreclosures, underwater homes, shadow inventory, elevated levels of unemployment and under-employment, sizeable and increasing student debt levels, and a fragile economy.

11.4.3 North American construction materials

Traditionally, the prices of North American sawn softwood and structural panels are greatly influenced by US housing starts. North American homes have been the primary market for sawn softwood and structural panels – in the past, some estimates indicated that 65% of wood building materials were directed to this market sector. Building-material prices improved greatly in 2012 and 2013 (graph 11.4.3). Much of this price gain can be attributed to the Chinese export market, improved US new housing starts, and the repair and remodelling sector.

GRAPH 11.4.3

US building material prices versus housing starts, 2002-2013



Note: f=forecast (May 2013 data). Structural panel composite price unit=1,000 square feet, framing lumber composite price unit=1,000 board feet, lumber composite price unit=1,000 board feet, lumber Producer Price Index (1982=100).

Source: US Census, 2013a, Random Lengths, 2013; US Bureau of Labor Statistics, 2013.

Currently, US repair and remodelling and industrial markets each consume more lumber than new housing, about 21.4 million m³ and 20.3 mil m³, respectively (board feet converted to m² using a nominal board feet to actual m² ratio of 590). New home construction consumed 17.2 mil m³ in 2012. (RISI, 2013). The consumption of sawn softwood for construction and remodelling consumes most of the sawn softwood produced in the region and other products such as structural panels and some EWP are also very strongly tied to the housing sector.



Source: APA, 2013.

11.4.4 Canadian housing-construction market

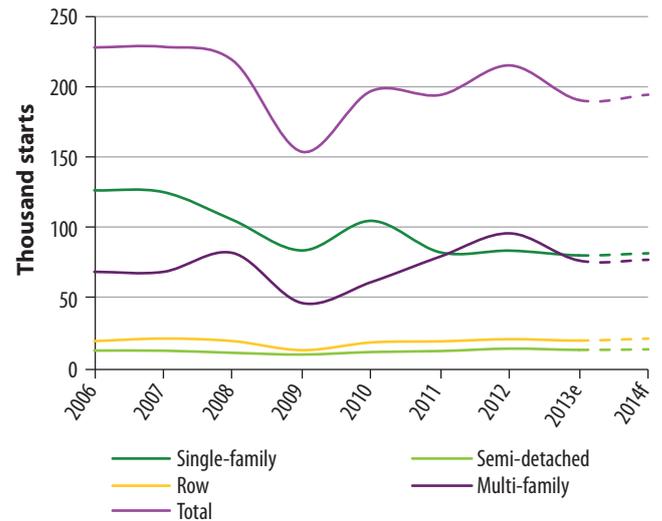
The Canadian housing market is healthy and 189,930 starts were projected for 2013 (Canada Mortgage and Housing Corporation (CMHC, 2013). In the past year, several analysts have opined that Canada is in a housing bubble; however, if there is a bubble, it has not yet burst. As a result of economic uncertainty, forecasts are for between 171,200 and 217,000 units in 2014.

Of the 2013 projection, 80,000 single-family and 110,000 multi-family starts are forecast. The 2014 outlook for single-family starts is relatively stable at 82,000. Multi-family starts are expected to range between 100,000 and 125,000 in 2014 (Graph 11.4.4.) (CMHC, 2013).

The 2013 forecast for GDP was revised downwards, reflecting an uncertain economic outlook. The economy is expected to expand in 2014, which would lend support to the housing market. Employment is forecast to increase by 1.3% in 2013 and 1.6% in 2014 and, although modest, this also would aid the housing market (CMHC, 2013).

GRAPH 11.4.4

Canada housing starts, 2006-2014



Notes: 2013 is an estimate. 2014 is a CHMC forecast.

Source: CHMC (Canada Housing and Mortgage Corporation), 2013.

11.5 REFERENCES

- Allen, T. 2013. March 2013 compared with February 2013. Available at: http://epp.eurostat.ec.europa.eu/cache/ity_public/4-17052013-ap/en/4-17052013-ap-en.pdf. Eurostat Press Office. Accessed June 12.
- Canada Mortgage and Housing Corporation. 2013. Housing market outlook – Canada's housing market is stabilizing. Available at: www.cmhc-schl.gc.ca/odpub/esub/64591/64591_2011_Q02.pdf. Ottawa, CA. Accessed May 31.
- CEI-Bois. 2010. Tackle Climate Change: Use Wood. Available at: www.cei-bois.org/files/b03500-p01-84-ENG.pdf
- Euroconstruct. 2012. 74th Euroconstruct Summary Report, European Construction Forecasts through 2015. The 74th Euroconstruct Conference. Munich, Germany. December 2012. 250 pp.
- Euroconstruct. 2013. 75th Euroconstruct Summary Report. The 75th Euroconstruct Conference. Copenhagen, Denmark. June 2013. 180 pp.
- Federal Housing Finance Agency. 2013. US house prices rose 1.9 percent in first quarter 2013. Available at: www.fhfa.gov/webfiles/25172/2013Q1HPI.pdf. Accessed June 24.
- Gardino, P. 2011. Il mercato italiano delle case in legno nel 2010. Promo Legno, Milano.
- lambda, V. 2013. Construction sector in Russia H1 2013. PMR Research. Kraków, Poland. June 11. 5 pp.
- Joint Center for Housing Studies. 2013. State of the Nation's Housing 2013. Available at: www.jchs.harvard.edu/research/state_nations_housing. Accessed June 14. 44 pp.
- Leading Indicator of Remodeling Activity (LIRA). 2013. Momentum Building for Home Improvement Activity. 18 April 2013. Available at: www.jchs.harvard.edu/momentum-building-home-improvement-activity. Accessed April 22.
- LenderProcessingServices. 2013. May 2013 Mortgage Performance Observations. Available at: www.lpsvcs.com/LPSCorporateInformation/CommunicationCenter/DataReports/MortgageMonitor/201304MortgageMonitor/MortgageMonitorApril2013.pdf. Accessed June 14.
- National Association of Realtors. 2013. April existing home sales ease. Available at: www.realtor.org/press_room/news_releases/2011/05/sales_ease. Accessed May 20.
- Random Lengths. 2013. Random lengths framing lumber and structural panel composite prices. Available at: www.randomlengths.com/In-Depth/Monthly-Composite-Prices. Random Lengths Publications, Inc. Eugene, Oregon. Accessed June 10.
- RealtyTrac. 2013. Market Summary. Available at: www.realtytrac.com/statsandtrends. Accessed June 12.
- RISI. 2013. January 13 Lumber Commentary. Available at: www.risiinfo.com/Marketing/Commentaries/lumber_com.pdf. Accessed June 14.
- Russian Federation Federal State Statistics Service. 2013. Housing Construction. Available at: www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/materials/news/a2740e0044b81cf2beadff0abf71f704. Accessed June 11.
- Standard & Poor's. 2013. Home prices see strong gains in the first quarter of 2013. www.housingviews.com/wp-content/uploads/2013/05/CSHomePrice_Release_March-Qtr1-Results.pdf. Accessed May 28.
- Standard & Poor's/Case Shiller home price indices. 2013. Available at: <http://us.spindices.com/index-family/real-estate/sp-case-shiller>
- UNECE/FAO. 2012. Sawn softwood markets 2011-2012. pp 49. Forest Products Annual Market Review 2011-2012.
- US Bureau of Labor Statistics. 2013. Producer price index-commodities. Available at: <http://data.bls.gov/PDO/servlet/SurveyOutputServlet>. Accessed May 6.
- US Census-DOC. 2013a. New residential construction in May 2013. Available at: www.census.gov/const/www/newresconstindex.html. Accessed June 18.
- US Census-DOC. 2013b. New residential sales in May 2013. Available at: www.census.gov/construction/c30/pdf/privsa.pdf. Accessed June 25.
- US Census-DOC. 2013c. Value of construction put in place – May 2013. Available at: www.census.gov/construction/nrs/pdf/newressales.pdf. Accessed July 1.
- The World Bank. 2013. Global economic prospects - June 2013: less volatile, but slower growth. A. Burns and T.J. van Rensburg (authors). Available at: <http://go.worldbank.org/46Q9NMFY80>. Accessed June 13.





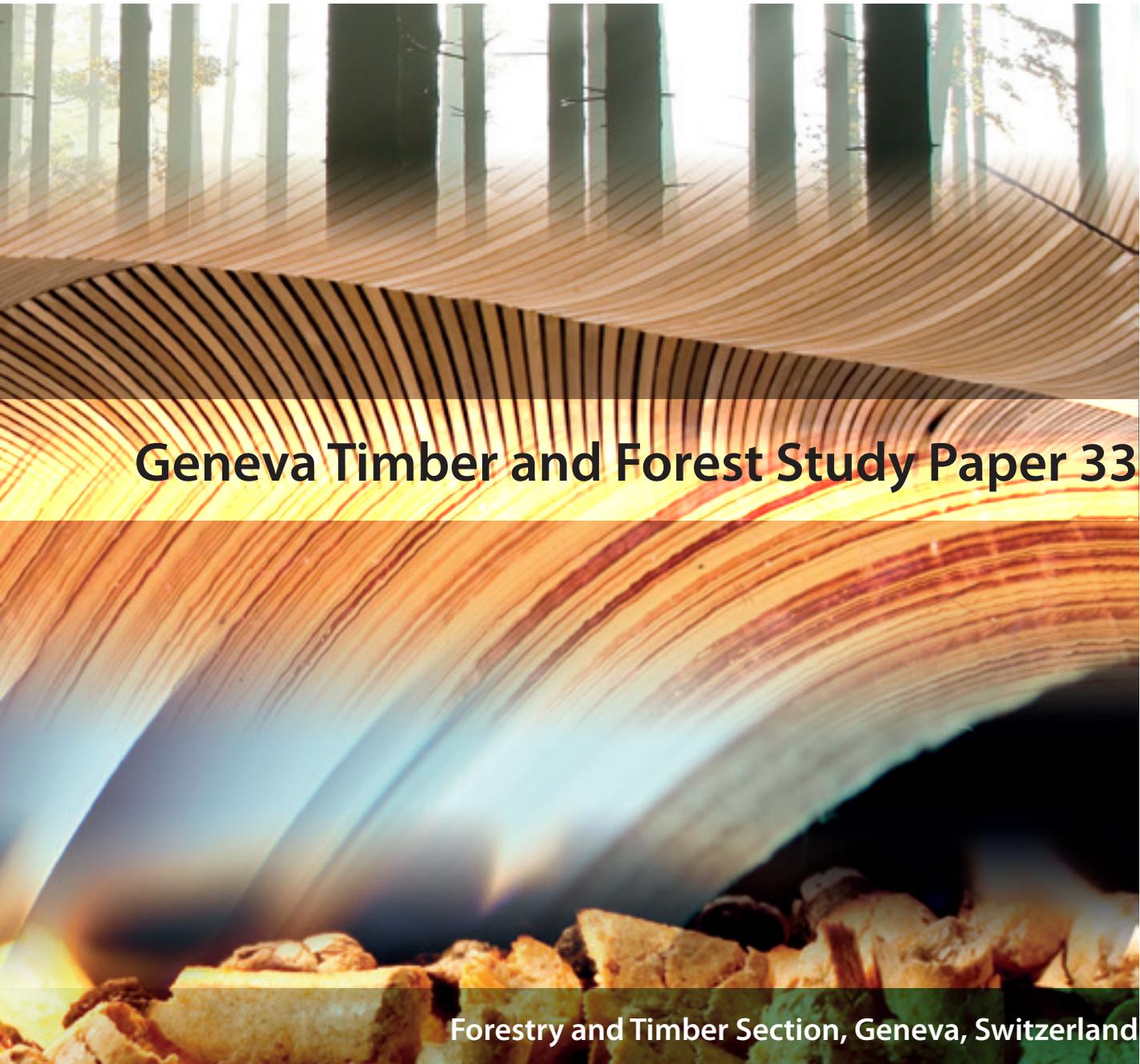
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