

ECONOMIC ANALYSIS

Tax reform and home prices: Is there a cause for concern?

Filip Blazheski / Nathaniel Karp

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- **The net effect of the proposed tax changes on house prices will be limited**
- **Doubling the standard deduction will increase the incentives to rent**
- **The lower cap on mortgage interest deduction can lower prices of homes in higher price ranges over time**
- **Other tax proposals will tighten housing market conditions and generate upward pressures on home prices**

The shape and form of the housing-related tax provisions became clearer with the passage of the two versions of H.R.1 - Tax Cuts and Jobs Act in the House of Representatives in mid-November and in the Senate in early December. The most important provisions affecting the housing market are related to the increase in the standard deduction, the cap on the mortgage interest deduction (MID), the changes in the state and local tax (SALT) deduction and the adjustments regarding the capital gain exclusion from the sale of a principal residence. While the provisions in the two versions differ in some instances, they are being reconciled in the current stage of the legislative process (Table 1).

After the proposals were made public, the debate on the potential impact on the residential market has intensified between those that expect a significant decline in house prices and housing demand and those that see a muted impact. This brief attempts to shed some light on how the tax reform can impact the housing market, including home prices, considering current and expected market conditions.

Table 1. Proposed changes and likely effects

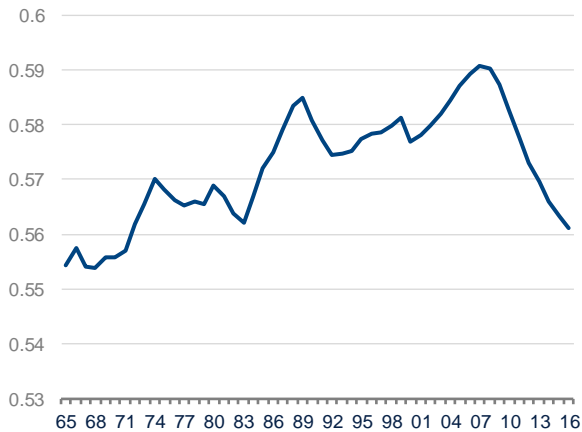
	Current	House version	Senate version	Reported reconciled version	Likely effects if changes are signed into law
Standard deduction	\$6,500 / \$13,000 currently (singles/couples)	Increase to \$12,200 / \$24,400	Increase to \$12,000 / \$24,000	Increase to \$12,000 / \$24,000	- Lower incentive to itemize and thus use MID and SALT - Lower incentive to own vs. rent
MID	Mortgage interest deductibility on mortgages up to \$1 million for a primary and secondary residence	Limit to the mortgage interest deduction for debt up to \$500,000 incurred after November 2, 2017 for a primary residence	No changes	Limit to the mortgage interest deduction for newly incurred debt of up to \$750,000	- Lower incentive to purchase large and second homes - Lower incentive to purchase homes in expensive locations - Higher relative attractiveness of lower cost locations
SALT	Income or sales and property taxes generally deductible	Suspension of the deduction for state and local income or sales taxes for a married couple filing jointly, unless paid or accrued in a trade or business, but maintaining a property tax deduction of \$10,000	Suspension of the deductibility of state and local, and foreign, real property, and state and local personal property taxes entirely	Suspension of the deduction, except for a maximum of \$10,000 combined amount of property taxes and either income taxes or sales taxes	- Lower incentive to purchase large and second homes - Lower incentive to purchase homes in expensive locations - Higher relative attractiveness of lower tax locations
Exclusion of gain from sale of principal residence	Deductibility of gain from sale or exchange of property owned for 5 years and used as a principal residence for 2 or more years in that period.	Modification of the deduction of so that the property has to be owned for 8 years and used as a principal residence for 5 or more years in that period	Same as House version	Same as House version	- Lower incentive to sell/relocate

Source: BBVA Research, www.congress.gov, www.uscode.house.gov, NYT and Politico

The current state of the housing market

The current state of the housing market is characterized by a lack of housing units relative to the size of population (Figure 1), and a historically low supply of existing homes for sale (Figure 2). In previous briefs we have provided detailed explanations of the causes behind these trends in [housing starts](#) and [existing homes for sale](#). These tight market conditions have led to strong home price appreciation for the past five years. Adjusting for inflation and population, the national CoreLogic house price index has increased 34% after dipping to its lowest level back in 2012. Moreover, in nominal terms, house prices increased 7% YoY in October, the fastest pace since May 2014, and reached a new record high, surpassing the previous peak of April 2006. The lack of existing homes for sale is especially noticeable in economically attractive locations (Figure 3), where home prices tend to be higher (Figure 4). This backdrop will have a significant effect on how the proposed tax changes will affect the housing market.

Figure 1: Housing units per resident, 20+ years old (Units)



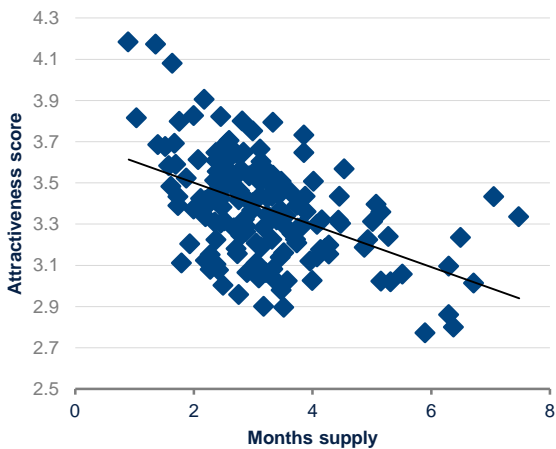
Source: BBVA Research and Census Bureau

Figure 2: Supply of existing homes for sale (% and months, seasonally adjusted)



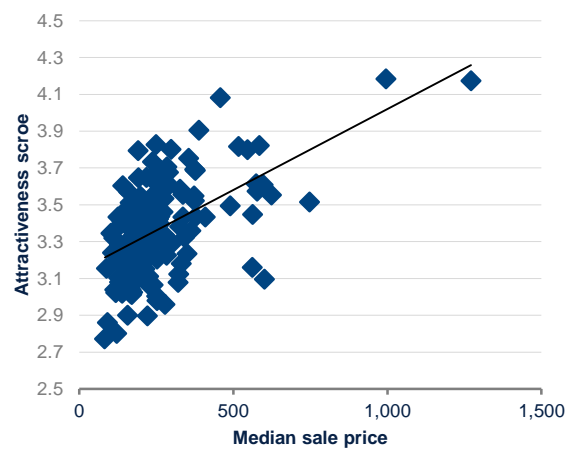
Source: BBVA Research, Census Bureau and NAR

Figure 3: Supply of existing homes for sale vs. MSA attractiveness, months' supply & score, May-Oct. 2017



Source: BBVA Research and Redfin

Figure 4: Median sale prices vs. MSA attractiveness, \$K and score, May-October 2017



Source: BBVA Research and Redfin

Effects of the increased standard deduction and lower MID cap on home prices

The Council of Economic Advisors (CEA) recently published an assessment on the potential effects of the changes in the tax code on home prices. According to the CEA, the benefit of the MID is larger for taxpayers in higher marginal tax brackets and for borrowers that purchase higher-priced homes, which makes MID a highly regressive subsidy. Based on empirical estimates, the CEA concluded that minimizing the use of the MID due to increased use of the standard deduction and a cap of the MID at \$500,000 may lead to a modest fall in equilibrium home prices.¹ The fall in prices could be explained by a decline in the intrinsic value of housing due to a smaller value of the embedded tax benefit to their owners and/or prospective buyers.

In order to obtain more precise estimates of the effects of the proposed tax changes, we first calculated the present value (PV) of the MID for different size mortgages, consistent with current economic conditions (Table 2). We then simulated a sample of 10,000 housing units with a price distribution consistent with October 2017's home sales, as published by the National Association of Realtors (NAR)². Each housing unit was assigned a mortgage loan with a mean loan-to-value (LTV) ratio of 0.53, as reported in the latest Survey of Consumer Finances³. We also assumed that families that currently use the standard deduction owe less than \$190,000 on their mortgage, while families that will use the increased standard deduction will be the ones that owe less than \$350,000⁴. Finally, we randomly selected 7.5% of the units that will be sold each year, based on the ratio of existing home sales to owner-occupied housing stock at the beginning of 2017. The MID cap will apply only to new mortgages, which entails some loss in intrinsic value of the units that are priced above certain thresholds as show in in Table 2, which would nevertheless be gradual as these units change ownership.

Table 2: Effects of MID cap as proposed in the House tax bill version and reported reconciled version on mortgages of different size

Mortgage	Home price	Mortgage	PV of interest payments	Tax benefit under current model	PV of interest payments under \$500K cap model	Tax benefit under \$500K cap model	Loss due to proposed cap of \$500K	Loss as % of home price as a result of proposed 500K cap ⁵	PV of interest payments under \$750K cap model	Tax benefit under \$750K cap model	Loss due to proposed cap of \$750K	Loss as % of home price as a result of proposed 750K cap ⁶
1	\$ 1,250,000	\$ 1,000,000	\$ (483,028)	\$ 144,908	\$ (314,706)	\$94,412	\$ 50,497	4.0%	\$ (429,976)	\$128,993	\$ 15,916	1.3%
2	\$ 1,100,000	\$ 880,000	\$ (425,065)	\$ 127,519	\$ (308,096)	\$92,429	\$ 35,091	3.2%	\$ (406,706)	\$122,012	\$ 5,508	0.5%
3	\$ 900,000	\$ 720,000	\$ (347,780)	\$ 104,334	\$ (293,907)	\$88,172	\$ 16,162	1.8%	\$ (347,780)	\$104,334	\$ -	0.0%
4	\$ 700,000	\$ 560,000	\$ (270,496)	\$ 81,149	\$ (264,010)	\$79,203	\$ 1,946	0.3%	\$ (270,496)	\$81,149	\$ -	0.0%
5	\$ 500,000	\$ 400,000	\$ (193,211)	\$ 57,963	\$ (193,211)	\$57,963	\$ -	0.0%	\$ (193,211)	\$57,963	\$ -	0.0%
6	\$ 300,000	\$ 240,000	\$ (115,927)	\$ 34,778	\$ (115,927)	\$34,778	\$ -	0.0%	\$ (115,927)	\$34,778	\$ -	0.0%

Assumptions: 80% loan to value, 4% fixed interest rate, 30% effective tax rate, 30 year amortization, tax changes persist beyond the 10-year timeframe

Source: BBVA Research

¹ The Council of Economic Advisers (2017). Evaluating the Anticipated Effects of Changes to the Mortgage Interest Deduction. <https://goo.gl/ohi7E7>

² NAR web site. <https://www.nar.realtor/research-and-statistics/housing-statistics/existing-home-sales>. Accessed December 11, 2017

³ 2016 Survey of Consumer Finances. The ratio used is Mean family holdings of mortgages / Mean value of primary residence.

<https://www.federalreserve.gov/econres/scfindex.htm>

⁴ A 30-year 4.0% fixed rate mortgage with \$350K outstanding at the beginning of the year entails interest expense in the amount of \$13,888, which if itemized would be combined with SALT deduction (max \$10,000 under the new provisions) and charitable donation deductions

⁵ The decline in intrinsic value occurs only if the home is sold

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The results from the simulation suggest that: 1) in the short-term, the doubling of the standard deduction has a larger effect than changes to the MID cap; 2) in the long-run, the effect from the lower MID cap becomes larger for more expensive homes. Therefore, in MSAs with lower relative home values, the impact will tend to be more immediate, while in MSAs with higher relative house prices (Table 3), the impact will be more protracted.

The effect of doubling the standard deduction is a one-off occurring mainly in 2018.⁷ Holding all else equal, overall home price appreciation in 2018 slows from our current baseline scenario of 5.9% to 4.3% YoY. This is almost entirely due to the effect of doubling the standard deduction. The result is consistent with a lower incentive for middle class households to own a home rather than rent. This reflects a shift in the benefits from deductions away from the asset in favor of the individual. Based on the simulation, the effects on home prices at various price levels are presented in Figure 5. The effect from the proposed new MID caps takes time to materialize (Figure 6 & 7) since only new mortgages will be subject to the new cap, while mortgages originated prior to the end of 2017 will be grandfathered.

For example, the intrinsic value of a home in San Jose, CA that is listed at \$1.148M (close to the median price of this MSA), carries property tax in the amount of \$8,819⁸, is owned by a married couple and has an 80% LTV mortgage, would not be impacted by the doubling of the standard deduction, since the sum of the interest payments and property tax is \$24,691 – an amount higher than the proposed new standard deduction.

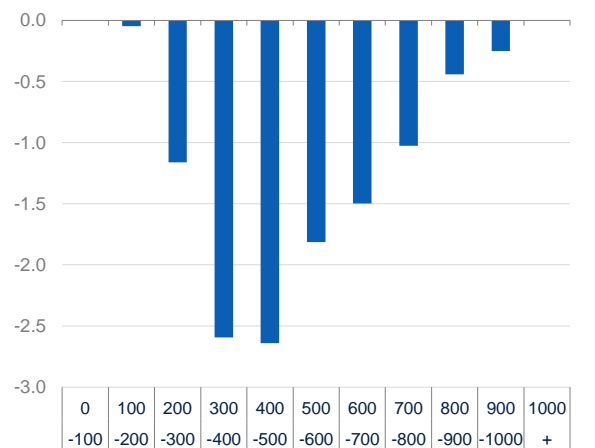
If the house is sold, it would be worth less to the new owner due to the MID cap that she would be subject to. Assuming both the seller and the buyer have an effective tax rate of 30%, the intrinsic value could decline by \$39,742 (3.5%) and \$8,477 (0.7%) in the case of the \$500K and \$750K cap, respectively. However, the likelihood of this sale in any given year is relatively small, and thus the intrinsic value of the housing stock would be affected by the MID cap only gradually.

Table 3: MSAs with median home prices over \$300K, 3Q17

MSA	Median price, \$	% YoY
San Jose-Sunnyvale-Santa Clara, CA	1,165,000	12.6%
San Francisco-Oakland-Hayward, CA	900,000	9.3%
Urban Honolulu, HI	760,000	3.4%
San Diego-Carlsbad, CA	607,000	7.9%
Los Angeles-Long Beach-Anaheim, CA	595,000	8.7%
Boulder, CO	564,000	8.6%
Seattle-Tacoma-Bellevue, WA	479,000	13.2%
Boston-Cambridge-Newton, MA-NH	464,000	6.6%
Naples-Immokalee-Marco Island, FL	430,000	2.4%
Bridgeport-Stamford-Norwalk, CT	419,000	8.0%
New York-Newark-Jersey City, NY-NJ-PA	419,000	5.1%
Denver-Aurora-Lakewood, CO	418,000	7.9%
Washington-Arlington-Alexandria, DC-VA-MD	409,000	4.6%
Portland-Vancouver-Hillsboro, OR-WA	389,000	8.9%
Barnstable Town, MA	387,000	3.9%
Reno, NV	356,000	11.6%
Sacramento--Roseville--Arden-Arcade, CA	350,000	8.2%
Miami-Fort Lauderdale-West Palm Beach, FL	340,000	8.0%
Riverside-San Bernardino-Ontario, CA	340,000	7.9%

Source: BBVA Research and NAR

Figure 5: Simulation results. Effect from doubling of standard deduction on home price growth in 2018 by \$K price point (percentage points)

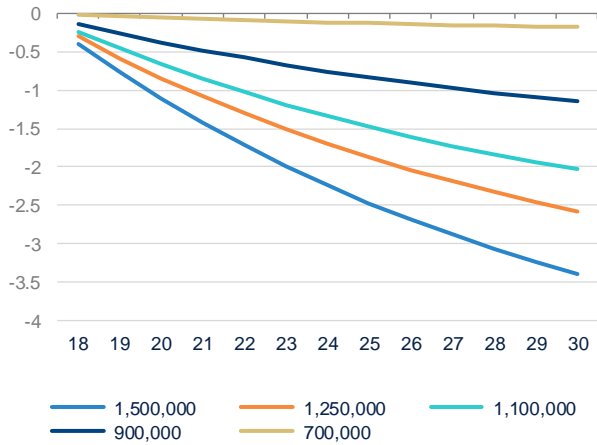


Source: BBVA Research

⁷ Changes to the standard deduction in future years would obviously alter this estimate

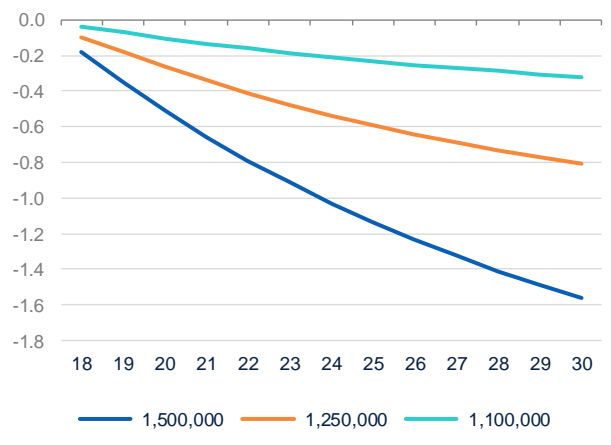
⁸ Actual home for sale listed on www.redfin.com

Figure 6: Effect from \$500K MID cap on home values by home price (percentage points)



Source: BBVA Research

Figure 7: Effect from \$750K MID cap on home values by home price (percentage points)



Source: BBVA Research

State and local tax (SALT)

MSAs with higher home prices tend to be in jurisdictions with high SALT. Therefore, the removal of the SALT deduction could affect the relative attractiveness of these MSAs. However, the effects will not materialize immediately because taxes are only one of the many factors that determine the relative attractiveness of each MSA. The attractiveness of these locations is not primarily based on tax efficiency, but rather on the underlying strength of economic fundamentals, many of which center around the information technology sector that delivers high value-added products and employs a large proportion of high-skilled professionals with higher relative incomes. In addition, states, residents and businesses will take action to minimize the negative impact of the tax changes, while over time many taxpayers will incorporate the higher effective tax burden as part of the overall cost of living in these locations. In this regard, as long as the benefits from living in these MSAs –better professional opportunities and higher quality of life- is higher than the tax burden, housing demand will remain growing. Thus, the effects in these locations are likely to be small.

All else not equal

The full impact of the changes to the MID and standard deduction will also depend on how they interact with other changes to tax legislation, and other factors that determine the supply and demand of housing. Both the MID cap and the stricter requirements for exclusion of gain from sale of principal residence will act as a disincentive for existing homeowners to sell, and would make the tight market even tighter. With the low overall availability of housing units, the gradual ramp-up of new construction and the building constraints in many attractive locations, the proposed changes could even contribute to faster home price appreciation in some places.

To the extent that lower business tax rates increase cash flows and profitability of companies, the tax reform could also allow builders to absorb some of the price effects while still creating incentives to supply new homes. In addition, some estimates suggest that a large proportion of the individual tax cuts will go to high-income earners. Therefore, the demand

for more expensive homes may not necessarily decline as a result of the implied losses from the lower MID cap, if the buyers of these properties are somewhat compensated through lower tax rates.

Behavioral biases favoring ownership of homes relative to renting could also dampen the effect of the increase of the standard deduction on the intrinsic value of homes. The effect would materialize by buyers not reacting strongly to the increased incentive to rent relative to own, resulting in ongoing strong demand for homes for sale.

Demographic and structural changes could have even larger effects on housing demand and home prices. For example, the aging of the population is likely to have a negative effect on large and more expensive houses as these individuals move to smaller and cheaper units after retirement. In contrast, if the current environment of low productivity and real income growth were to turnaround quickly, younger individuals would be in a better financial position to move out from their parents' homes and purchase a house.

Last but not least, it is worth highlighting that a major determinant of home prices is land regulation. Empirical evidence overwhelmingly confirms that stiffer restrictions and less competition result in higher house prices, usually benefiting the incumbent. Therefore, if the tax reform is accompanied by deregulation and lower barriers to entry, home prices would not only decline or grow at a slower pace, but a larger share of this benefit would accrue to the buyer. This windfall would have a larger impact on younger and lower-income individuals.

Bottom line

The proposed changes in taxation are not likely to result in a home price decline, due to the current tight housing market conditions, although we do expect a slower rate of price appreciation in some price ranges, which is also likely to shift over time. It is important to take into account the interaction of the different proposed tax changes as these could result in an even tighter market. Owners may not want to sell to avoid losing part of the deduction or capital gain exemption, which would lower the relative amount of homes for sale. The tax reform could also improve geographic mobility, which in turn could help lift home prices, particularly in areas that were more severely hit during and after the Great Recession. In addition, limitations to the SALT deduction have the potential to improve the relative attractiveness of lower-tax jurisdictions. For lenders, the strategy for 2018-2019 could imply some cautiousness in the \$300K to \$700K home price range. In later years, the attention should shift to the more expensive homes. Finally, higher incentives to rent are likely to favor the multifamily segment.

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