UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2020

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ____ to ____

Commission File Number: 1-12378

NVR, Inc.

(Exact name of registrant as specified in its charter)

Virginia	**54-1394360**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

11700 Plaza America Drive, Suite 500
Reston, Virginia 20190
(703) 956-4000
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Not Applicable
(Former name, former address, and former fiscal year if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.01 per share	**NVR**	**New York Stock Exchange**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of November 2, 2020 there were 3,720,432 total shares of common stock outstanding.

NVR, Inc.
FORM 10-Q

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PART I. FINANCIAL INFORMATION
Item 1. Financial Statements

NVR, Inc.

Condensed Consolidated Balance Sheets

(in thousands, except share and per share data)

(unaudited)

	September 30, 2020	December 31, 2019
ASSETS		
Homebuilding:		
Cash and cash equivalents	$ 2,539,460	$ 1,110,892
Restricted cash	28,026	17,943
Receivables	21,461	18,278
Inventory:		
Lots and housing units, covered under sales agreements with customers	1,541,587	1,075,420
Unsold lots and housing units	124,371	184,352
Land under development	63,608	69,196
Building materials and other	33,620	18,320
	1,763,186	1,347,288
Contract land deposits, net	377,105	413,851
Property, plant and equipment, net	58,570	52,260
Operating lease right-of-use assets	54,964	63,825
Reorganization value in excess of amounts allocable to identifiable assets, net	41,580	41,580
Other assets	204,343	176,144
	5,088,695	3,242,061
Mortgage Banking:		
Cash and cash equivalents	21,546	29,412
Restricted cash	3,172	2,276
Mortgage loans held for sale, net	340,927	492,125
Property and equipment, net	4,896	5,828
Operating lease right-of-use assets	13,376	13,345
Reorganization value in excess of amounts allocable to identifiable assets, net	7,347	7,347
Other assets	19,961	17,421
	411,225	567,754
Total assets	$ 5,499,920	$ 3,809,815

See notes to condensed consolidated financial statements.

NVR, Inc.

Condensed Consolidated Balance Sheets (Continued)

(in thousands, except share and per share data)

(unaudited)

	September 30, 2020	December 31, 2019
LIABILITIES AND SHAREHOLDERS' EQUITY		
Homebuilding:		
Accounts payable	$ 342,412	$ 262,987
Accrued expenses and other liabilities	387,757	346,035
Customer deposits	211,122	131,886
Operating lease liabilities	61,382	71,095
Senior notes	1,517,982	598,301
	2,520,655	1,410,304
Mortgage Banking:		
Accounts payable and other liabilities	45,906	43,985
Operating lease liabilities	14,366	14,282
	60,272	58,267
Total liabilities	2,580,927	1,468,571
Commitments and contingencies		
Shareholders' equity:		
Common stock, $0.01 par value; 60,000,000 shares authorized; 20,555,330 shares issued as of both September 30, 2020 and December 31, 2019	206	206
Additional paid-in capital	2,188,207	2,055,407
Deferred compensation trust – 106,697 and 107,295 shares of NVR, Inc. common stock as of September 30, 2020 and December 31, 2019, respectively	(16,710)	(16,912)
Deferred compensation liability	16,710	16,912
Retained earnings	8,506,116	7,909,872
Less treasury stock at cost – 16,836,943 and 16,922,558 shares as of September 30, 2020 and December 31, 2019, respectively	(7,775,536)	(7,624,241)
Total shareholders' equity	2,918,993	2,341,244
Total liabilities and shareholders' equity	$ 5,499,920	$ 3,809,815

See notes to condensed consolidated financial statements.

NVR, Inc.

Condensed Consolidated Statements of Income

(in thousands, except per share data)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Homebuilding:				
Revenues	$ 1,920,751	$ 1,873,331	$ 5,065,216	$ 5,273,985
Other income	1,988	6,696	9,732	18,266
Cost of sales	(1,536,044)	(1,518,276)	(4,115,280)	(4,282,470)
Selling, general and administrative	(105,741)	(109,969)	(318,610)	(337,913)
Operating income	280,954	251,782	641,058	671,868
Interest expense	(11,309)	(6,008)	(26,689)	(18,034)
Homebuilding income	269,645	245,774	614,369	653,834
Mortgage Banking:				
Mortgage banking fees	69,261	37,933	127,692	124,484
Interest income	2,222	3,340	6,545	8,910
Other income	887	819	2,215	2,039
General and administrative	(20,180)	(20,407)	(57,149)	(57,999)
Interest expense	(378)	(285)	(1,009)	(775)
Mortgage banking income	51,812	21,400	78,294	76,659
Income before taxes	321,457	267,174	692,663	730,493
Income tax expense	(64,991)	(43,387)	(96,419)	(108,091)
Net income	$ 256,466	$ 223,787	$ 596,244	$ 622,402
Basic earnings per share	$ 69.19	$ 60.94	$ 161.85	$ 171.43
Diluted earnings per share	$ 65.11	$ 56.11	$ 153.03	$ 156.61
Basic weighted average shares outstanding	3,706	3,672	3,684	3,631
Diluted weighted average shares outstanding	3,939	3,988	3,896	3,974

See notes to condensed consolidated financial statements.

NVR, Inc.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Cash flows from operating activities:		
Net income	$ 596,244	$ 622,402
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	16,801	15,369
Equity-based compensation expense	35,565	58,680
Contract land deposit and other impairments (recoveries), net	32,751	(456)
Gain on sale of loans, net	(100,348)	(95,690)
Mortgage loans closed	(3,663,220)	(3,749,567)
Mortgage loans sold and principal payments on mortgage loans held for sale	3,914,000	3,885,688
Distribution of earnings from unconsolidated joint ventures	—	3,376
Net change in assets and liabilities:		
Increase in inventory	(416,488)	(243,339)
Decrease (increase) in contract land deposits	4,585	(8,217)
Increase in receivables	(3,060)	(8,481)
Increase in accounts payable and accrued expenses	109,921	27,995
Increase in customer deposits	79,236	4,691
Other, net	(26,647)	(3,015)
Net cash provided by operating activities	579,340	509,436
Cash flows from investing activities:		
Investments in and advances to unconsolidated joint ventures	(435)	(335)
Distribution of capital from unconsolidated joint ventures	—	8,237
Purchase of property, plant and equipment	(12,329)	(16,740)
Proceeds from the sale of property, plant and equipment	665	1,517
Net cash used in investing activities	(12,099)	(7,321)
Cash flows from financing activities:		
Purchase of treasury stock	(216,582)	(365,542)
Proceeds from the issuance of senior notes	923,905	—
Debt issuance costs	(4,750)	—
Principal payments on finance lease liabilities	(665)	(116)
Proceeds from the exercise of stock options	162,522	247,355
Net cash provided by (used in) financing activities	864,430	(118,303)
Net increase in cash, restricted cash, and cash equivalents	1,431,671	383,812
Cash, restricted cash, and cash equivalents, beginning of the period	1,160,804	732,248
Cash, restricted cash, and cash equivalents, end of the period	$ 2,592,475	$ 1,116,060
Supplemental disclosures of cash flow information:		
Interest paid during the period, net of interest capitalized	$ 24,957	$ 24,040
Income taxes paid during the period, net of refunds	$ 86,214	$ 109,116

See notes to condensed consolidated financial statements.

NVR, Inc.
Notes to Condensed Consolidated Financial Statements
(dollars and shares in thousands, except per share data)
(unaudited)

1. Significant Accounting Policies

Basis of Presentation

The accompanying unaudited, condensed consolidated financial statements include the accounts of NVR, Inc. ("NVR", the "Company", "we", "us" or "our") and its subsidiaries and certain other entities in which the Company is deemed to be the primary beneficiary (see Notes 2 and 3 to the accompanying condensed consolidated financial statements). Intercompany accounts and transactions have been eliminated in consolidation. The statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and with the instructions to Form 10-Q and Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. Because the accompanying condensed consolidated financial statements do not include all of the information and footnotes required by GAAP, they should be read in conjunction with the financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2019. In the opinion of management, all adjustments (consisting only of normal recurring accruals except as otherwise noted herein) considered necessary for a fair presentation have been included. Operating results for the three and nine months ended September 30, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

For the three and nine months ended September 30, 2020 and 2019, comprehensive income equaled net income; therefore, a separate statement of comprehensive income is not included in the accompanying condensed consolidated financial statements.

Cash and Cash Equivalents

The beginning-of-period and end-of-period cash, restricted cash, and cash equivalent balances presented on the accompanying condensed consolidated statements of cash flows includes cash related to a consolidated joint venture which is included in homebuilding "Other assets" on the accompanying condensed consolidated balance sheets. The cash related to this consolidated joint venture as of September 30, 2020 and December 31, 2019 was $271 and $281, respectively, and as of September 30, 2019 and December 31, 2018 was $293 and $320, respectively.

Revenue Recognition

Homebuilding revenue is recognized on the settlement date at the contract sales price, when control is transferred to our customers. Our contract liabilities, which consist of deposits received from customers ("Handmoney") on homes not settled, were $211,122 and $131,886 as of September 30, 2020 and December 31, 2019, respectively. We expect that substantially all of the December 31, 2019 Handmoney balance will be recognized in revenue in 2020. Our prepaid sales compensation totaled approximately $27,513 and $14,600 as of September 30, 2020 and December 31, 2019, respectively. Prepaid sales compensation is included in homebuilding "Other assets" on the accompanying condensed consolidated balance sheets.

Recently Adopted Accounting Pronouncements

Effective January 1, 2020, we adopted Accounting Standards Update ("ASU") 2016-13, *Financial Instruments - Credit Losses (Topic 326),* which changed the impairment recognition of financial assets from an as incurred recognition methodology to requiring immediate recognition of estimated credit losses expected to occur over the remaining life of many financial assets. Our adoption of this standard did not have a material effect on our consolidated financial statements and related disclosures.

Effective January 1, 2020, we adopted ASU 2017-04, *Intangibles – Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment*. Under the standard, an impairment charge to goodwill is recorded in the amount that the carrying amount of a reporting unit's goodwill exceeds its fair value, not to exceed the amount of goodwill allocated to that reporting unit. Our adoption of this standard had no impact on our consolidated financial statements and related disclosures.

2. Variable Interest Entities ("VIEs")

Fixed Price Finished Lot Purchase Agreements ("Lot Purchase Agreements")

We generally do not engage in the land development business. Instead, we typically acquire finished building lots at market prices from various development entities under Lot Purchase Agreements. The Lot Purchase Agreements require deposits that may be forfeited if we fail to perform under the Lot Purchase Agreements. The deposits required under the Lot Purchase Agreements are in the form of cash or letters of credit in varying amounts, and typically range up to 10% of the aggregate purchase price of the finished lots.

We believe this lot acquisition strategy reduces the financial requirements and risks associated with direct land ownership and land development. We may, at our option, choose for any reason and at any time not to perform under these Lot Purchase Agreements by delivering notice of our intent not to acquire the finished lots under contract. Our sole legal obligation and economic loss for failure to perform under these Lot Purchase Agreements is limited to the amount of the deposit pursuant to the liquidated damage provisions contained within the Lot Purchase Agreements. None of the creditors of any of the development entities with which we enter Lot Purchase Agreements have recourse to our general credit. We generally do not have any specific performance obligations to purchase a certain number or any of the lots, nor do we guarantee completion of the development by the developer or guarantee any of the developers' financial or other liabilities.

We are not involved in the design or creation of the development entities from which we purchase lots under Lot Purchase Agreements. The developer's equity holders have the power to direct 100% of the operating activities of the development entity. We have no voting rights in any of the development entities. The sole purpose of the development entity's activities is to generate positive cash flow returns for the equity holders. Further, we do not share in any of the profit or loss generated by the project's development. The profits and losses are passed directly to the developer's equity holders.

The deposit placed by us pursuant to the Lot Purchase Agreement is deemed to be a variable interest in the respective development entities. Those development entities are deemed to be VIEs. Therefore, the development entities with which we enter into Lot Purchase Agreements, including the joint venture limited liability corporations discussed below, are evaluated for possible consolidation by us. An enterprise must consolidate a VIE when that enterprise has a controlling financial interest in the VIE. An enterprise is deemed to have a controlling financial interest if it has (i) the power to direct the activities of a VIE that most significantly impact the entity's economic performance, and (ii) the obligation to absorb losses of the VIE that could be significant to the VIE or the rights to receive benefits from the VIE that could be significant to the VIE.

We believe the activities that most significantly impact a development entity's economic performance are the operating activities of the entity. The development entity's equity investors bear the full risk during the development process. Unless and until a development entity completes finished building lots through the development process, the entity does not earn any revenues. The operating development activities are managed solely by the development entity's equity investors.

The development entities with which we contract to buy finished lots typically select the respective projects, obtain the necessary zoning approvals, obtain the financing required with no support or guarantees from us, select who will purchase the finished lots and at what price, and manage the completion of the infrastructure improvements, all for the purpose of generating a cash flow return to the development entity's equity holders and all independent of us. We possess no more than limited protective legal rights through the Lot Purchase Agreement in the specific finished lots that we are purchasing, and we possess no participative rights in the development entities. Accordingly, we do not have the power to direct the activities of a developer that most significantly impact the developer's economic performance. For this reason, we have concluded that we are not the primary beneficiary of the development entities with which we enter into Lot Purchase Agreements, and therefore, we do not consolidate any of these VIEs.

(dollars and shares in thousands, except per share data)

As of September 30, 2020, we controlled approximately 100,000 lots under Lot Purchase Agreements with third parties through deposits in cash and letters of credit totaling approximately $434,200 and $6,800, respectively. As noted above, our sole legal obligation and economic loss for failure to perform under these Lot Purchase Agreements is limited to the amount of the deposit pursuant to the liquidated damage provisions contained in the Lot Purchase Agreements. During the first quarter of 2020, we incurred pre-tax charges of approximately $36,400 related to the impairment of deposits under Lot Purchase Agreements ("lot deposits") due primarily to deteriorating market conditions in certain of our markets related to the COVID-19 pandemic. For the three month period ended September 30, 2020, we recorded a net reversal of approximately $4,800 related to previously impaired lot deposits, as market conditions have improved. For the nine months ended September 30, 2020, we incurred net pre-tax lot deposit charges of approximately $32,500. The impairment charges and reversals are recorded in cost of sales on the accompanying condensed consolidated statements of income. Our contract land deposit is shown net of a $58,781 and $27,572 impairment reserve at September 30, 2020 and December 31, 2019, respectively.

In addition, we have certain properties under contract with land owners that are expected to yield approximately 6,300 lots, which are not included in the number of total lots controlled. Some of these properties may require rezoning or other approvals to achieve the expected yield. These properties are controlled with deposits in cash and letters of credit totaling approximately $1,700 and $100, respectively, as of September 30, 2020, of which approximately $1,100 is refundable if certain contractual conditions are not met. We generally expect to assign the raw land contracts to a land developer and simultaneously enter into a Lot Purchase Agreement with the assignee if the project is determined to be feasible.

Our total risk of loss related to contract land deposits as of September 30, 2020 and December 31, 2019 was as follows:

	September 30, 2020	December 31, 2019
Contract land deposits	$ 435,886	$ 441,423
Loss reserve on contract land deposits	(58,781)	(27,572)
Contract land deposits, net	377,105	413,851
Contingent obligations in the form of letters of credit	6,942	5,606
Total risk of loss	$ 384,047	$ 419,457

3. Joint Ventures

On a limited basis, we obtain finished lots using joint venture limited liability corporations ("JVs"). The JVs are typically structured such that we are a non-controlling member and are at risk only for the amount we have invested, or have committed to invest, in addition to any deposits placed under Lot Purchase Agreements with the joint venture. We are not a borrower, guarantor or obligor on any debt of the JVs, as applicable. We enter into Lot Purchase Agreements to purchase lots from these JVs, and as a result have a variable interest in these JVs.

At September 30, 2020, we had an aggregate investment totaling approximately $28,700 in four JVs that are expected to produce approximately 6,050 finished lots, of which approximately 2,700 lots were controlled by us and the remaining approximately 3,350 lots were either under contract with unrelated parties or not currently under contract. In addition, we had additional funding commitments totaling approximately $3,800 to one of the JVs at September 30, 2020. We have determined that we are not the primary beneficiary of three of the JVs because we either share power with the other JV partner or the other JV partner has the controlling financial interest. The aggregate investment in unconsolidated JVs was approximately $28,700 and $26,700 at September 30, 2020 and December 31, 2019, respectively, and is reported in the “Other assets” line item on the accompanying condensed consolidated balance sheets. None of the unconsolidated JVs had any indicators of impairment as of September 30, 2020. For the remaining JV, we have concluded that we are the primary beneficiary because we have the controlling financial interest in the JV. As of December 31, 2019, all activities under the consolidated JV had been completed. As of September 30, 2020, we had no investment remaining in the JV and the JV had remaining balances of $271 in cash and $247 in accrued expenses, which are included in homebuilding "Other assets" and "Accrued expenses and other liabilities," respectively, in the accompanying condensed consolidated balance sheets.

(dollars and shares in thousands, except per share data)

We recognize income from the JVs as a reduction to the lot cost of the lots purchased from the respective JVs when the homes are settled, based on the expected total profitability and the total number of lots expected to be produced by the respective JVs.

We classify distributions received from unconsolidated JVs using the cumulative earnings approach. As a result, distributions received up to the amount of cumulative earnings recognized by us are reported as distributions of earnings and those in excess of that amount are reported as a distribution of capital. These distributions are classified within the accompanying condensed consolidated statements of cash flows as cash flows from operating activities and investing activities, respectively.

4. Land Under Development

On a limited basis, we directly acquire raw land parcels already zoned for their intended use to develop into finished lots. Land under development includes the land acquisition costs, direct improvement costs, capitalized interest, where applicable, and real estate taxes.

As of September 30, 2020, we directly owned three separate raw land parcels with an aggregate carrying value of $63,608 that are expected to produce approximately 500 finished lots. We also had additional funding commitments of approximately $5,200 under a joint development agreement related to one parcel, a portion of which we expect will be offset by development credits of approximately $2,900. None of the raw parcels had any indicators of impairment as of September 30, 2020.

5. Capitalized Interest

We capitalize interest costs to land under development during the active development of finished lots. In addition, we capitalize interest costs on our JV investments while the investments are considered qualified assets pursuant to ASC Topic 835-20 - *Interest*. Capitalized interest is transferred to sold or unsold inventory as the development of finished lots is completed, then charged to cost of sales upon our settlement of homes and the respective lots. Interest incurred in excess of the interest capitalizable based on the level of qualified assets is expensed in the period incurred.

The following table reflects the changes in our capitalized interest during the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Interest capitalized, beginning of period	$ 2,673	$ 3,854	$ 3,499	$ 4,154
Interest incurred	11,792	6,596	28,092	19,702
Interest charged to interest expense	(11,687)	(6,293)	(27,698)	(18,809)
Interest charged to cost of sales	(370)	(581)	(1,485)	(1,471)
Interest capitalized, end of period	$ 2,408	$ 3,576	$ 2,408	$ 3,576

NVR, Inc.
Notes to Condensed Consolidated Financial Statements
(dollars and shares in thousands, except per share data)
(unaudited)

6. Earnings per Share

The following weighted average shares and share equivalents were used to calculate basic and diluted earnings per share for the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Weighted average number of shares outstanding used to calculate basic EPS	3,706	3,672	3,684	3,631
Dilutive securities:				
Stock options and restricted share units	233	316	212	343
Weighted average number of shares and share equivalents outstanding used to calculate diluted EPS	3,939	3,988	3,896	3,974

The following non-qualified stock options ("Options") issued under equity incentive plans were outstanding during the three and nine months ended September 30, 2020 and 2019, but were not included in the computation of diluted earnings per share because the effect would have been anti-dilutive.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Anti-dilutive securities	21	251	30	319

7. Shareholders' Equity

A summary of changes in shareholders' equity for the three months ended September 30, 2020 is presented below:

	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Deferred Compensation Trust	Deferred Compensation Liability	Total
Balance, June 30, 2020	$ 206	$ 2,151,623	$ 8,249,650	$ (7,789,067)	$ (16,710)	$ 16,710	$ 2,612,412
Net income	—	—	256,466	—	—	—	256,466
Equity-based compensation	—	13,639	—	—	—	—	13,639
Proceeds from Options exercised	—	36,476	—	—	—	—	36,476
Treasury stock issued upon option exercise and restricted share vesting	—	(13,531)	—	13,531	—	—	—
Balance, September 30, 2020	$ 206	$ 2,188,207	$ 8,506,116	$ (7,775,536)	$ (16,710)	$ 16,710	$ 2,918,993

NVR, Inc.
Notes to Condensed Consolidated Financial Statements
(dollars and shares in thousands, except per share data)
(unaudited)

A summary of changes in shareholders' equity for the nine months ended September 30, 2020 is presented below:

	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Deferred Compensation Trust	Deferred Compensation Liability	Total
Balance, December 31, 2019	$ 206	$ 2,055,407	$ 7,909,872	$ (7,624,241)	$ (16,912)	$ 16,912	$ 2,341,244
Net income	—	—	596,244	—	—	—	596,244
Deferred compensation activity, net	—	—	—	—	202	(202)	—
Purchase of common stock for treasury	—	—	—	(216,582)	—	—	(216,582)
Equity-based compensation	—	35,565	—	—	—	—	35,565
Proceeds from Options exercised	—	162,522	—	—	—	—	162,522
Treasury stock issued upon option exercise and restricted share vesting	—	(65,287)	—	65,287	—	—	—
Balance, September 30, 2020	$ 206	$ 2,188,207	$ 8,506,116	$ (7,775,536)	$ (16,710)	$ 16,710	$ 2,918,993

We repurchased approximately 58 shares of our common stock during the nine months ended September 30, 2020, all of which were repurchased in the first quarter. We settle Option exercises and vesting of RSUs by issuing shares of treasury stock. Approximately 29 and 143 shares were issued from the treasury account during the three and nine months ended September 30, 2020, respectively, in settlement of Option exercises and vesting of RSUs. Shares are relieved from the treasury account based on the weighted average cost basis of treasury shares.

A summary of changes in shareholders' equity for the three months ended September 30, 2019 is presented below:

	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Deferred Compensation Trust	Deferred Compensation Liability	Total
Balance, June 30, 2019	$ 206	$ 1,962,156	$ 7,429,948	$ (7,272,871)	$ (16,912)	$ 16,912	$ 2,119,439
Net income	—	—	223,787	—	—	—	223,787
Purchase of common stock for treasury	—	—	—	(61,063)	—	—	(61,063)
Equity-based compensation	—	20,770	—	—	—	—	20,770
Proceeds from Options exercised	—	68,524	—	—	—	—	68,524
Treasury stock issued upon option exercise and restricted share vesting	—	(31,270)	—	31,270	—	—	—
Balance, September 30, 2019	$ 206	$ 2,020,180	$ 7,653,735	$ (7,302,664)	$ (16,912)	$ 16,912	$ 2,371,457

(dollars and shares in thousands, except per share data)

A summary of changes in shareholders' equity for the nine months ended September 30, 2019 is presented below:

	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Deferred Compensation Trust	Deferred Compensation Liability	Total
Balance, December 31, 2018	$ 206	$ 1,820,223	$ 7,031,333	$ (7,043,200)	$ (16,937)	$ 16,937	$ 1,808,562
Net income	—	—	622,402	—	—	—	622,402
Deferred compensation activity, net	—	—	—	—	25	(25)	—
Purchase of common stock for treasury	—	—	—	(365,542)	—	—	(365,542)
Equity-based compensation	—	58,680	—	—	—	—	58,680
Proceeds from Options exercised	—	247,355	—	—	—	—	247,355
Treasury stock issued upon option exercise and restricted share vesting	—	(106,078)	—	106,078	—	—	—
Balance, September 30, 2019	$ 206	$ 2,020,180	$ 7,653,735	$ (7,302,664)	$ (16,912)	$ 16,912	$ 2,371,457

We repurchased approximately 18 and 130 shares of our common stock during the three and nine months ended September 30, 2019, respectively. Approximately 73 and 250 shares were issued from the treasury account during the three and nine months ended September 30, 2019, respectively, in settlement of Option exercises and vesting of RSUs.

8. Product Warranties

We establish warranty and product liability reserves ("Warranty Reserve") to provide for estimated future expenses as a result of construction and product defects, product recalls and litigation incidental to our homebuilding business. Liability estimates are determined based on management's judgment, considering such factors as historical experience, the estimated current cost of corrective action, manufacturers' and subcontractors' participation in sharing the cost of corrective action, consultations with third party experts such as engineers, and discussions with our general counsel and outside counsel retained to handle specific product liability cases.

The following table reflects the changes in our Warranty Reserve during the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Warranty reserve, beginning of period	$ 111,219	$ 100,659	$ 108,053	$ 103,700
Provision	20,894	20,217	48,992	48,486
Payments	(18,564)	(17,205)	(43,496)	(48,515)
Warranty reserve, end of period	$ 113,549	$ 103,671	$ 113,549	$ 103,671

(dollars and shares in thousands, except per share data)

9. Segment Disclosures

We disclose four homebuilding reportable segments that aggregate geographically our homebuilding operating segments, and our mortgage banking operations presented as one reportable segment. The homebuilding reportable segments are comprised of operating divisions in the following geographic areas:

Mid Atlantic:	Maryland, Virginia, West Virginia, Delaware and Washington, D.C.
North East:	New Jersey and Eastern Pennsylvania
Mid East:	New York, Ohio, Western Pennsylvania, Indiana and Illinois
South East:	North Carolina, South Carolina, Florida and Tennessee

Homebuilding profit before tax includes all revenues and income generated from the sale of homes, less the cost of homes sold, selling, general and administrative expenses and a corporate capital allocation charge. The corporate capital allocation charge is eliminated in consolidation and is based on the segment's average net assets employed. The corporate capital allocation charged to the operating segment allows the Chief Operating Decision Maker ("CODM") to determine whether the operating segment's results are providing the desired rate of return after covering our cost of capital.

Assets not allocated to the operating segments are not included in either the operating segment's corporate capital allocation charge or the CODM's evaluation of the operating segment's performance. We record charges on contract land deposits when it is determined that it is probable that recovery of the deposit is impaired. For segment reporting purposes, impairments on contract land deposits are generally charged to the operating segment upon the termination of a Lot Purchase Agreement with the developer, or the restructuring of a Lot Purchase Agreement resulting in the forfeiture of the deposit. Mortgage banking profit before tax consists of revenues generated from mortgage financing, title insurance and closing services, less the costs of such services and general and administrative costs. Mortgage banking operations are not charged a corporate capital allocation charge.

In addition to the corporate capital allocation and contract land deposit impairments discussed above, the other reconciling items between segment profit and consolidated profit before tax include unallocated corporate overhead (including all management incentive compensation), equity-based compensation expense, consolidation adjustments and external corporate interest expense. Overhead functions such as accounting, treasury and human resources are centrally performed and these costs are not allocated to our operating segments. Consolidation adjustments consist of such items necessary to convert the reportable segments' results, which are predominantly maintained on a cash basis, to a full accrual basis for external financial statement presentation purposes, and are not allocated to our operating segments. Our external corporate interest expense primarily consists of interest charges on our 3.95% Senior Notes due 2022 and 3.00% Senior Notes due 2030 and is not charged to the operating segments because the charges are included in the corporate capital allocation discussed above.

The following tables present segment revenues, profit and assets with reconciliations to the amounts reported for the consolidated enterprise, where applicable:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenues:				
Homebuilding Mid Atlantic	$ 949,472	$ 1,012,056	$ 2,563,375	$ 2,875,411
Homebuilding North East	157,973	120,478	362,328	364,909
Homebuilding Mid East	404,992	406,145	1,025,642	1,104,603
Homebuilding South East	408,314	334,652	1,113,871	929,062
Mortgage Banking	69,261	37,933	127,692	124,484
Total consolidated revenues	$ 1,990,012	$ 1,911,264	$ 5,192,908	$ 5,398,469

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(unaudited)

	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Income before taxes:				
Homebuilding Mid Atlantic	$ 104,700	$ 124,900	$ 284,440	$ 348,067
Homebuilding North East	14,272	13,164	31,081	36,187
Homebuilding Mid East	45,109	50,210	103,575	125,976
Homebuilding South East	52,554	39,721	142,463	105,582
Mortgage Banking	52,890	22,835	80,461	78,566
Total segment profit before taxes	269,525	250,830	642,020	694,378
Reconciling items:				
Contract land deposit reserve adjustment (1)	4,867	248	(31,208)	1,572
Equity-based compensation expense (2)	(13,639)	(20,770)	(35,565)	(58,680)
Corporate capital allocation (3)	60,662	57,887	177,184	168,621
Unallocated corporate overhead	(26,915)	(27,914)	(87,912)	(89,003)
Consolidation adjustments and other (4)	38,244	12,859	54,769	31,569
Corporate interest expense	(11,287)	(5,966)	(26,625)	(17,964)
Reconciling items sub-total	51,932	16,344	50,643	36,115
Consolidated income before taxes	$ 321,457	$ 267,174	$ 692,663	$ 730,493

(1) This item represents changes to the contract land deposit impairment reserve, which are not allocated to the reportable segments. See further discussion of lot deposit impairment charges in Note 2.

(2) The decrease in equity-based compensation expense for the three and nine month periods ended September 30, 2020 was primarily attributable to stock options issued in 2014 under the 2014 Equity Incentive Plan becoming fully vested in 2019. In addition, stock compensation expense for both the three and nine month periods ended September 30, 2020 was favorably impacted by higher stock option forfeitures during 2020.

(3) This item represents the elimination of the corporate capital allocation charge included in the respective homebuilding reportable segments. The corporate capital allocation charge is based on the segment's monthly average asset balance, and was as follows for the periods presented:

	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Corporate capital allocation charge:				
Homebuilding Mid Atlantic	$ 31,383	$ 31,504	$ 92,720	$ 93,297
Homebuilding North East	5,793	5,028	17,142	14,381
Homebuilding Mid East	10,386	9,791	29,436	28,303
Homebuilding South East	13,100	11,564	37,886	32,640
Total	$ 60,662	$ 57,887	$ 177,184	$ 168,621

(4) The increase in our consolidation adjustments and other reconciling item for both the three and nine month periods ended September 30, 2020 relates primarily to the significant increase in lumber prices during the third quarter of 2020. Our reportable segments' results include intercompany profits of our production facilities, which were negatively impacted by the increase in lumber costs. The increase in lumber costs related to homes not yet settled is eliminated through the consolidation adjustment. As these homes currently in inventory are settled in subsequent quarters, our consolidated homebuilding margins will be negatively impacted by the higher lumber costs.

(dollars and shares in thousands, except per share data)

	September 30, 2020	December 31, 2019
Assets:		
Homebuilding Mid Atlantic	$ 1,198,050	$ 1,024,996
Homebuilding North East	199,162	166,860
Homebuilding Mid East	395,668	293,773
Homebuilding South East	474,484	400,979
Mortgage Banking	403,878	560,407
Total segment assets	2,671,242	2,447,015
Reconciling items:		
Cash and cash equivalents	2,539,460	1,110,892
Deferred taxes	125,743	115,731
Intangible assets and goodwill	49,717	49,834
Homebuilding operating lease right-of-use assets	54,964	63,825
Finance lease right-of-use assets	15,674	7,052
Contract land deposit reserve	(58,781)	(27,572)
Consolidation adjustments and other	101,901	43,038
Reconciling items sub-total	2,828,678	1,362,800
Consolidated assets	$ 5,499,920	$ 3,809,815

10. Fair Value

GAAP assigns a fair value hierarchy to the inputs used to measure fair value. Level 1 inputs are quoted prices in active markets for identical assets and liabilities. Level 2 inputs are inputs other than quoted market prices that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs.

Financial Instruments

The following table presents the estimated fair values and carrying values of our Senior Notes as of September 30, 2020 and December 31, 2019. The estimated fair value is based on recent market prices of similar transactions, which is classified as Level 2 within the fair value hierarchy.

	September 30, 2020	December 31, 2019
Estimated Fair Values:		
3.95% Senior Notes due 2022	$ 633,708	$ 626,520
3.00% Senior Notes due 2030	970,227	—
Total	$ 1,603,935	$ 626,520
Carrying Values:		
3.95% Senior Notes due 2022	$ 598,768	$ 598,301
3.00% Senior Notes due 2030	919,214	—
Total	$ 1,517,982	$ 598,301

Except as otherwise noted below, we believe that insignificant differences exist between the carrying values and the fair values of our financial instruments, which consist primarily of cash equivalents, due to their short term nature.

Derivative Instruments and Mortgage Loans Held for Sale

In the normal course of business, our wholly-owned mortgage subsidiary, NVR Mortgage Finance, Inc. ("NVRM"), enters into contractual commitments to extend credit to our homebuyers with fixed expiration dates. The commitments become effective when the borrowers "lock-in" a specified interest rate within time frames established by NVRM. All mortgagors are evaluated for credit worthiness prior to the extension of the commitment. Market risk arises if interest rates move adversely between the time of the "lock-in" of rates by the borrower and the sale date of the loan to a broker/dealer. To mitigate the effect of the interest rate risk inherent in providing rate lock commitments to borrowers, NVRM enters into optional or mandatory delivery forward sale contracts to sell whole loans and mortgage-backed securities to broker/dealers. The forward sales contracts lock in an interest rate and price for the sale of loans similar to the specific rate lock commitments. NVRM does not engage in speculative or trading derivative activities. Both the rate lock commitments to borrowers and the forward sale contracts to broker/dealers are undesignated derivatives and, accordingly, are marked to fair value through earnings. At September 30, 2020, there were rate lock commitments to extend credit to borrowers aggregating $791,352 and open forward delivery contracts aggregating $958,681, which hedge both the rate lock commitments and closed loans held for sale.

The fair value of NVRM's rate lock commitments to borrowers and the related input levels include, as applicable:

i) the assumed gain/loss of the expected resultant loan sale (Level 2);

ii) the effects of interest rate movements between the date of the rate lock and the balance sheet date (Level 2); and

iii) the value of the servicing rights associated with the loan (Level 2).

The assumed gain/loss considers the excess servicing to be received or buydown fees to be paid upon securitization of the loan. The excess servicing and buydown fees are calculated pursuant to contractual terms with investors. To calculate the effects of interest rate movements, NVRM utilizes applicable published mortgage-backed security prices, and multiplies the price movement between the rate lock date and the balance sheet date by the notional loan commitment amount. NVRM sells all of its loans on a servicing released basis, and receives a servicing released premium upon sale. Thus, the value of the servicing rights is included in the fair value measurement and is based upon contractual terms with investors and varies depending on the loan type. NVRM assumes a fallout rate when measuring the fair value of rate lock commitments. Fallout is defined as locked loan commitments for which NVRM does not close a mortgage loan and is based on historical experience.

The fair value of NVRM's forward sales contracts to broker/dealers solely considers the market price movement of the same type of security between the trade date and the balance sheet date (Level 2). The market price changes are multiplied by the notional amount of the forward sales contracts to measure the fair value.

Mortgage loans held for sale are recorded at fair value when closed, and thereafter are carried at the lower of cost or fair value, net of deferred origination costs, until sold. Fair value is measured using Level 2 inputs. As of September 30, 2020, the fair value of loans held for sale of $340,927 included on the accompanying condensed consolidated balance sheet were increased by $4,285 from the aggregate principal balance of $336,642. As of December 31, 2019, the fair value of loans held for sale of $492,125 were increased by $7,019 from the aggregate principal balance of $485,106.

(dollars and shares in thousands, except per share data)

The fair value measurement of NVRM's undesignated derivative instruments was as follows:

	September 30, 2020	December 31, 2019
Rate lock commitments:		
Gross assets	$ 8,996	$ 8,132
Gross liabilities	667	497
Net rate lock commitments	$ 8,329	$ 7,635
Forward sales contracts:		
Gross assets	$ 607	$ 377
Gross liabilities	1,078	920
Net forward sales contracts	$ (471)	$ (543)

As of both September 30, 2020 and December 31, 2019, the net rate lock commitments are reported in mortgage banking "Other assets" and the net forward sales contracts are reported in mortgage banking "Accounts payable and other liabilities" on the accompanying condensed consolidated balance sheets.

The fair value measurement adjustment as of September 30, 2020 was as follows:

	Notional or Principal Amount	Assumed Gain/(Loss) From Loan Sale	Interest Rate Movement Effect	Servicing Rights Value	Security Price Change	Total Fair Value Measurement Gain/(Loss)
Rate lock commitments	$ 791,352	$ 1,995	$ 820	$ 5,514	$ —	$ 8,329
Forward sales contracts	$ 958,681	—	—	—	(471)	(471)
Mortgages held for sale	$ 336,642	1,398	(63)	2,950	—	4,285
Total fair value measurement		$ 3,393	$ 757	$ 8,464	$ (471)	$ 12,143

The total fair value measurement adjustment as of December 31, 2019 was $14,111. NVRM recorded a fair value adjustment to income of $1,735 for the three months ended September 30, 2020 and a fair value adjustment to expense of $1,968 for the nine months ended September 30, 2020. NVRM recorded a fair value adjustment to expense of $8,711 for the three months ended September 30, 2019, and recorded a fair value adjustment to income of $2,842 for the nine months ended September 30, 2019.

Unrealized gains/losses from the change in the fair value measurements are included in earnings as a component of mortgage banking fees in the accompanying condensed consolidated statements of income. The fair value measurement will be impacted in the future by the change in the value of the servicing rights, interest rate movements, security price fluctuations, and the volume and product mix of NVRM's closed loans and locked loan commitments.

11. Debt

As of September 30, 2020, we had the following debt instruments outstanding:

3.95% Senior Notes due 2022 ("2022 Senior Notes")

The 2022 Senior Notes have a principal balance of $600,000. The 2022 Senior Notes mature on September 15, 2022 and bear interest at 3.95%, payable semi-annually in arrears on March 15 and September 15. The 2022 Senior Notes were issued at a discount to yield 3.97% and have been reflected net of the unamortized discount and unamortized debt issuance costs in the accompanying condensed consolidated balance sheet.

3.00% Senior Notes due 2030

On May 4, 2020, the Company issued $600,000 of 3.00% Senior Notes due 2030 (the "2030 Senior Notes" and together with the 2022 Senior Notes, the "Senior Notes"). The 2030 Senior Notes were issued at a discount to yield 3.02% and have been reflected net of the unamortized discount and unamortized debt issuance costs in the accompanying condensed consolidated balance sheet. The offering of the 2030 Senior Notes resulted in aggregate net proceeds of approximately $595,300, after deducting underwriting discount and offering expenses. The 2030 Senior Notes mature on May 15, 2030 and bear interest at 3.00%, payable semi-annually in arrears on May 15 and November 15. The 2030 Senior Notes are senior unsecured obligations and rank equal in right of payment to all of our existing and future unsecured senior indebtedness and other obligations that are not, by their terms, expressly subordinated in right of payment to the 2030 Senior Notes.

On September 9 and September 17, 2020, the Company issued an additional $250,000 and $50,000, respectively, of the 2030 Senior Notes (the "Additional Senior Notes"). The Additional Senior Notes were issued at a premium to yield 2.00% and have been reflected net of the unamortized premium and unamortized debt issuance costs in the accompanying condensed consolidated balance sheet. The offering of the Additional Senior Notes resulted in aggregate net proceeds of approximately $323,900, including the underwriting premium, less offering expenses. The Additional Senior Notes form a single series with the 2030 Senior Notes and have substantially identical terms as the 2030 Senior Notes.

Credit Agreement

We have an unsecured Credit Agreement (the “Credit Agreement”), which provides for aggregate revolving loan commitments of $200,000 (the “Facility”). Under the Credit Agreement, we may request increases of up to $300,000 to the Facility in the form of revolving loan commitments or term loans to the extent that new or existing lenders agree to provide additional revolving loan or term loan commitments. The Credit Agreement provides for a $100,000 sublimit for the issuance of letters of credit, of which approximately $11,450 was outstanding at September 30, 2020, and a $25,000 sublimit for a swing line commitment. The Credit Agreement termination date is July 15, 2021. There was no debt outstanding under the Facility at September 30, 2020.

Repurchase Agreement

NVRM provides for its mortgage origination and other operating activities using cash generated from its operations, borrowings from its parent company, NVR, as well as a revolving mortgage repurchase agreement (the “Repurchase Agreement”), which is non-recourse to NVR. The Repurchase Agreement provides for loan purchases up to $150,000, subject to certain sub-limits. Amounts outstanding under the Repurchase Agreement are collateralized by the Company’s mortgage loans held for sale.

In July 2020, NVRM entered into the Twelfth Amendment to the Repurchase Agreement, which extended the term of the Repurchase Agreement through July 21, 2021. All other terms and conditions under the amended Repurchase Agreement remained materially consistent. At September 30, 2020, there were no borrowing base limitations reducing the amount available under the Repurchase Agreement. There was no debt outstanding under the Repurchase Agreement at September 30, 2020.

12. Commitments and Contingencies

We are involved in various litigation arising in the ordinary course of business. In the opinion of management, and based on advice of legal counsel, this litigation is not expected to have a material adverse effect on our financial position, results of operations or cash flows. Legal costs incurred in connection with outstanding litigation are expensed as incurred.

(dollars and shares in thousands, except per share data)

13. Leases

We have operating leases for our corporate and division offices, production facilities, model homes, and certain office and production equipment. Additionally, we have entered into finance leases for one of our production facilities and certain plant equipment, which are recorded in homebuilding "Property, plant and equipment, net" and "Accrued expenses and other liabilities" on the accompanying condensed consolidated balance sheets. Our leases have remaining lease terms of up to 19.9 years, some of which include options to extend the leases for up to 10 years, and some of which include options to terminate the lease.

We recognize operating lease expense on a straight-line basis over the lease term. We have elected to use the portfolio approach for certain equipment leases which have similar lease terms and payment schedules. Additionally, for certain equipment we account for the lease and non-lease components as a single lease component. Our sublease income is de minimis.

We have certain leases, primarily the leases of model homes, which have initial lease terms of twelve months or less ("Short-term leases"). We elected to exclude these leases from the recognition requirements under Topic 842, and these leases have not been included in our recognized ROU assets and lease liabilities.

The components of lease expense were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Lease expense				
Operating lease expense	$ 7,689	$ 8,829	$ 23,542	$ 24,776
Finance lease expense:				
Amortization of ROU assets	327	125	874	146
Interest on lease liabilities	70	25	170	30
Short-term lease expense	5,625	5,530	18,236	16,775
Total lease expense	$ 13,711	$ 14,509	$ 42,822	$ 41,727

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(dollars and shares in thousands, except per share data)
(unaudited)

Other information related to leases was as follows:

	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Supplemental cash flows information:				
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	$ 7,339	$ 5,757	$ 20,733	$ 19,515
Operating cash flows from finance leases	70	46	170	30
Financing cash flows from finance leases	253	190	665	116
ROU assets obtained in exchange for lease obligations:				
Operating leases	$ 1,806	$ 5,532	$ 7,491	$ 11,546
Finance leases	$ 9,056	$ 1,065	$ 9,496	$ 6,369

	September 30, 2020	December 31, 2019
Weighted-average remaining lease term (in years):		
Operating leases	4.8	5.1
Finance leases	12.9	6.7
Weighted-average discount rate:		
Operating leases	3.4 %	3.6 %
Finance leases	2.8 %	2.8 %

14. Income Taxes

Our effective tax rate for the three and nine months ended September 30, 2020 was 20.2% and 13.9%, respectively, compared to 16.2% and 14.8% for the three and nine months ended September 30, 2019, respectively. The effective tax rate in each period was favorably impacted by the recognition of an income tax benefit related to excess tax benefits from stock option exercises totaling $17,834 and $80,343 for the three and nine months ended September 30, 2020, respectively, and $27,604 and $86,809 for the three and nine months ended September 30, 2019, respectively.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

(dollars in thousands, except per share data)

Forward-Looking Statements

Some of the statements in this Quarterly Report on Form 10-Q, as well as statements made by us in periodic press releases or other public communications, constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Certain, but not necessarily all, of such forward-looking statements can be identified by the use of forward-looking terminology, such as “believes,” “expects,” “may,” “will,” “should,” or “anticipates” or the negative thereof or other comparable terminology. All statements other than of historical facts are forward-looking statements. Forward-looking statements contained in this document may include those regarding market trends, our financial position and financial results, business strategy, the outcome of pending litigation, investigations or similar contingencies, projected plans and objectives of management for future operations. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results or performance to be materially different from future results, performance or achievements expressed or implied by the forward-looking statements. Such risk factors include, but are not limited to the following: the impact of COVID-19 on us and the economy generally; general economic and business conditions (on both a national and regional level); interest rate changes; access to suitable financing by us and our customers; increased regulation in the mortgage banking industry; the ability of our mortgage banking subsidiary to sell loans it originates into the secondary market; competition; the availability and cost of land and other raw materials used by us in our homebuilding operations; shortages of labor; weather related slow-downs; building moratoriums; governmental regulation; fluctuation and volatility of stock and other financial markets; mortgage financing availability; and other factors over which we have little or no control. We undertake no obligation to update such forward-looking statements except as required by law. For additional information regarding risk factors, see Part II, Item 1A of this Quarterly Report on Form 10-Q, Part I, Item 1A of NVR’s Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and other public filings.

Unless the context otherwise requires, references to “NVR,” “we,” “us,” or “our” include NVR and its consolidated subsidiaries.

Results of Operations for the Three and Nine Months Ended September 30, 2020 and 2019

Overview

Impact of COVID-19

The pandemic, caused by the novel strain of coronavirus ("COVID-19"), has had a significant impact on all facets of our business. Our primary focus as we face this challenge is to do everything we can to ensure the safety and well-being of our employees, customers and trade partners. Residential construction has been deemed an essential business in each of our markets since the beginning of the pandemic, except Pennsylvania and New York, where we faced closures into May. In each of our markets, we continue to operate in accordance with the guidelines issued by the Centers for Disease Control and Prevention as well as state and local guidelines, which has resulted in significant changes to the way we conduct business.

We experienced elevated sales cancellations and decreased new orders during March and April; however, the demand for new homes began to strengthen in May and continued to do so through September. Despite high unemployment rates attributable to the COVID-19 pandemic, demand in the third quarter increased primarily as a result of historically low mortgage interest rates coupled with low resale inventory levels.

From March through May, there were significant disruptions in the mortgage market as investors tightened their credit standards or exited the market, which resulted in significantly lower values for mortgage servicing rights and fewer customers able to qualify for a mortgage. From June through September, the mortgage market stabilized as mortgage demand increased.

There is uncertainty regarding the extent and timing of disruption to our business that may result from COVID-19 and related governmental actions. There is also uncertainty as to the effects of the pandemic and related economic relief efforts on the U.S. economy, unemployment, consumer confidence, demand for our homes and the mortgage market, including lending standards and secondary mortgage markets. We are unable to predict the extent to which this will impact our operational and financial performance, including the impact of future developments such as the duration and spread of COVID-19, corresponding governmental actions, and the impact of such on our employees, customers and trade partners.

Business

Our primary business is the construction and sale of single-family detached homes, townhomes and condominiums, all of which are primarily constructed on a pre-sold basis. To fully serve customers of our homebuilding operations, we also operate a mortgage banking and title services business. We primarily conduct our operations in mature markets. Additionally, we generally grow our business through market share gains in our existing markets and by expanding into markets contiguous to our current active markets. Our four homebuilding reportable segments consist of the following regions:

Mid Atlantic:	Maryland, Virginia, West Virginia, Delaware and Washington, D.C.
North East:	New Jersey and Eastern Pennsylvania
Mid East:	New York, Ohio, Western Pennsylvania, Indiana and Illinois
South East:	North Carolina, South Carolina, Florida and Tennessee

Our lot acquisition strategy is predicated upon avoiding the financial requirements and risks associated with direct land ownership and development. We generally do not engage in land development (see discussion below of our land development activities). Instead, we typically acquire finished lots at market prices from various third party land developers pursuant to fixed price finished lot purchase agreements (“Lot Purchase Agreements”). These Lot Purchase Agreements require deposits, typically ranging up to 10% of the aggregate purchase price of the finished lots, in the form of cash or letters of credit that may be forfeited if we fail to perform under the Lot Purchase Agreement. This strategy has allowed us to maximize inventory turnover, which we believe enables us to minimize market risk and to operate with less capital, thereby enhancing rates of return on equity and total capital.

In addition to constructing homes primarily on a pre-sold basis and utilizing what we believe is a conservative lot acquisition strategy, we focus on obtaining and maintaining a leading market position in each market we serve. This strategy allows us to gain valuable efficiencies and competitive advantages in our markets, which we believe contributes to minimizing the adverse effects of regional economic cycles and provides growth opportunities within these markets. Our continued success is contingent upon our ability to control an adequate supply of finished lots on which to build.

In certain specific strategic circumstances, we deviate from our historical lot acquisition strategy and engage in joint venture arrangements with land developers or directly acquire raw ground already zoned for its intended use for development. Once we acquire control of raw ground, we determine whether to sell the raw parcel to a developer and enter into a Lot Purchase Agreement with the developer to purchase the finished lots or to hire a developer to develop the land on our behalf. While joint venture arrangements and direct land development activity are not our preferred method of acquiring finished building lots, we may enter into additional transactions in the future on a limited basis where there exists a compelling strategic or prudent financial reason to do so. We expect, however, to continue to acquire substantially all our finished lot inventory using Lot Purchase Agreements with forfeitable deposits.

As of September 30, 2020, we controlled approximately 103,200 lots as described below.

Lot Purchase Agreements

We controlled approximately 100,000 lots under Lot Purchase Agreements with third parties through deposits in cash and letters of credit totaling approximately $434,200 and $6,800, respectively. Included in the number of controlled lots are approximately 8,600 lots for which we have recorded a contract land deposit impairment reserve of approximately $58,800 as of September 30, 2020.

Joint Venture Limited Liability Corporations ("JVs")

We had an aggregate investment totaling approximately $28,700 in four JVs, expected to produce approximately 6,050 lots. Of the lots to be produced by the JVs, approximately 2,700 lots were controlled by us and approximately 3,350 were either under contract with unrelated parties or currently not under contract. We had additional funding commitments totaling approximately $3,800 to one of the JVs at September 30, 2020.

Land Under Development

We directly owned three separate raw land parcels, zoned for their intended use, with an aggregate cost basis, including development costs, of approximately $63,600 that we intend to develop into approximately 500 finished lots. We had additional funding commitments of approximately $5,200 under a joint development agreement related to one parcel, a portion of which we expect will be offset by development credits of approximately $2,900.

See Notes 2, 3 and 4 to the condensed consolidated financial statements included herein for additional information regarding Lot Purchase Agreements, JVs and land under development, respectively.

Raw Land Purchase Agreements

In addition, we have certain properties under contract with land owners that are expected to yield approximately 6,300 lots, which are not included in the number of total lots controlled. Some of these properties may require rezoning or other approvals to achieve the expected yield. These properties are controlled with deposits in cash and letters of credit totaling approximately $1,700 and $100, respectively, as of September 30, 2020, of which approximately $1,100 is refundable if certain contractual conditions are not met. We generally expect to assign the raw land contracts to a land developer and simultaneously enter into a Lot Purchase Agreement with the assignee if the project is determined to be feasible.

Key Financial Results

Our consolidated revenues for the third quarter of 2020 totaled $1,990,012, a 4% increase from the third quarter of 2019. Net income for the third quarter ended September 30, 2020 was $256,466, or $65.11 per diluted share, increases of 15% and 16% when compared to net income and diluted earnings per share in the third quarter of 2019, respectively. Our homebuilding gross profit margin percentage increased to 20.0% in the third quarter of 2020 from 19.0% in the third quarter of 2019. New orders, net of cancellations ("New Orders") increased by 40% in the third quarter of 2020 compared to the third quarter of 2019. The average sales price for New Orders in the third quarter of 2020 increased by 4% to $384.2 compared to the third quarter of 2019. Income before tax from our mortgage banking segment totaled $51,812 in the third quarter of 2020, an increase of 142% when compared to $21,400 in the third quarter of 2019 due primarily to an increase in secondary marketing gains on sales of loans.

Homebuilding Operations

The following table summarizes the results of operations and other data for our consolidated homebuilding operations:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Financial Data:				
Revenues	$ 1,920,751	$ 1,873,331	$ 5,065,216	$ 5,273,985
Cost of sales	$ 1,536,044	$ 1,518,276	$ 4,115,280	$ 4,282,470
Gross profit margin percentage	20.0 %	19.0 %	18.8 %	18.8 %
Selling, general and administrative expenses	$ 105,741	$ 109,969	$ 318,610	$ 337,913
Operating Data:				
New orders (units)	6,681	4,766	17,597	15,144
Average new order price	$ 384.2	$ 369.2	$ 374.5	$ 364.8
Settlements (units)	5,180	5,124	13,706	14,337
Average settlement price	$ 370.8	$ 365.5	$ 369.5	$ 367.8
Backlog (units)			12,124	9,172
Average backlog price			$ 384.0	$ 371.0
New order cancellation rate	11.8 %	15.7 %	15.8 %	14.3 %

Consolidated Homebuilding - Three Months Ended September 30, 2020 and 2019

Homebuilding revenues increased 3% in the third quarter of 2020 compared to the same period in 2019, due primarily to 1% increases in both the number of units settled and the average settlement price. The increases in units settled and the average settlement price were favorably impacted by an 11% higher backlog unit balance and 2% higher average price of homes, respectively, in backlog entering the third quarter of 2020 compared to the same period in 2019.

Gross profit margin percentage in the third quarter of 2020 increased to 20.0%, from 19.0% in the third quarter of 2019. Gross profit margin in the third quarter of 2020 was favorably impacted by a relative shift in settlements to higher margin communities.

The number of New Orders and average sales price of New Orders increased 40% and 4%, respectively, in the third quarter of 2020 compared to the third quarter of 2019. New Orders and the average sales price of New Orders were higher in each of our market segments quarter over quarter due to favorable market conditions driven primarily by historically low mortgage interest rates coupled with low resale inventory levels.

Selling, general and administrative (“SG&A”) expense in the third quarter of 2020 decreased by approximately 4%, and as a percentage of revenue decreased to 5.5% in the third quarter of 2020 from 5.9% in the third quarter of 2019. The decrease in SG&A expense was attributable to a decrease in stock based compensation expense of approximately $6,600 due to the stock options issued in 2014 under the 2014 Equity Incentive Plan becoming fully vested in 2019 and higher stock option forfeitures quarter over quarter.

Consolidated Homebuilding - Nine Months Ended September 30, 2020 and 2019

Homebuilding revenues decreased 4% for the nine months ended September 30, 2020 compared to the same period in 2019, due primarily to a 4% decrease in the number of units settled. Settlements were negatively impacted by the COVID-19 pandemic primarily during the first and second quarters of 2020.

Gross profit margin percentage in the first nine months of 2020 were flat compared to the same period of 2019. Gross profit margin in 2020 was negatively impacted by contract land deposit impairment charges of approximately $32,500, or 65 basis points of revenue. The impact of the impairment charge was offset by improved gross profit margin attributable to a relative shift in settlements to higher margin communities.

The number of New Orders and average sales price of New Orders increased 16% and 3%, respectively, in the first nine months of 2020 compared to the same period in 2019. New Orders were higher as a result of the increase in New Orders in the third quarter of 2020, as discussed above.

SG&A expense in the first nine months of 2020 decreased by approximately 6%, and as a percentage of revenue was essentially flat year over year. SG&A expense was favorably impacted by a decrease in stock based compensation expense of approximately $22,800 due to the stock options issued in 2014 under the 2014 Equity Incentive Plan becoming fully vested in 2019 and higher stock option forfeitures year over year.

Our backlog represents homes sold but not yet settled with our customers. Backlog units and dollars were 12,124 units and $4,655,510, respectively, as of September 30, 2020, compared to 9,172 units and $3,402,933, respectively, as of September 30, 2019. The 32% increase in backlog units is primarily attributable to the increase in New Orders in the third quarter of 2020 as discussed above, coupled with a lower backlog turnover rate year over year.

In addition to the impact of the COVID-19 pandemic, our backlog may be impacted by customer cancellations for various reasons that are beyond our control, such as failure to obtain mortgage financing, inability to sell an existing home, job loss, or a variety of other reasons. In any period, a portion of the cancellations that we experience are related to new sales that occurred during the same period, and a portion are related to sales that occurred in prior periods and therefore appeared in the opening backlog for the current period. Expressed as the total of all cancellations during the period as a percentage of gross sales during the period, our cancellation rate was approximately 16% and 14% in the first nine months of 2020 and 2019, respectively. During the most recent four quarters, approximately 7% of a reporting quarter's opening backlog cancelled during the fiscal quarter. We can provide no assurance that our historical cancellation rates are indicative of the actual cancellation rate that may occur during the remainder of 2020 or future years. Other than those units that are cancelled, and subject to potential construction delays resulting from COVID-19 related restrictions, we expect to settle substantially all of our September 30, 2020 backlog within the next twelve months.

The backlog turnover rate is impacted by various factors, including, but not limited to, changes in New Order activity, internal production capacity, external subcontractor capacity and other external factors over which we do not exercise control, such as the impact of governmental orders to cease or limit construction activities as a result of COVID-19.

Reportable Segments

Homebuilding segment profit includes all revenues and income generated from the sale of homes, less the cost of homes sold, SG&A expenses, and a corporate capital allocation charge determined by corporate management. The corporate capital allocation charge eliminates in consolidation and is based on the segment's average net assets employed. The corporate capital allocation charged to the operating segment allows the Chief Operating Decision Maker to determine whether the operating segment is providing the desired rate of return after covering our cost of capital.

We record impairment charges on contract land deposits when we determine that it is probable that recovery of the deposit is impaired. For segment reporting purposes, impairments on contract land deposits are generally charged to the operating segment upon the termination of a Lot Purchase Agreement with the developer, or the restructuring of a Lot Purchase Agreement resulting in the forfeiture of the deposit. We evaluate our entire net contract land deposit portfolio for impairment each quarter. For presentation purposes below, the contract land deposit reserve at September 30, 2020 and December 31, 2019 has been allocated to the respective year's reportable segments to show contract land deposits on a net basis. The net contract land deposit balances below also include approximately $6,800 and $5,500 at September 30, 2020 and December 31, 2019, respectively, of letters of credit issued as deposits in lieu of cash.

The following tables summarize certain homebuilding operating activity by reportable segment for the three and nine months ended September 30, 2020 and 2019 or as of September 30, 2020 and December 31, 2019, as indicated.

Selected Segment Financial Data:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenues:				
Mid Atlantic	$ 949,472	$ 1,012,056	$ 2,563,375	$ 2,875,411
North East	157,973	120,478	362,328	364,909
Mid East	404,992	406,145	1,025,642	1,104,603
South East	408,314	334,652	1,113,871	929,062

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Gross profit margin:				
Mid Atlantic	$ 167,314	$ 189,535	$ 471,839	$ 540,060
North East	27,265	25,364	69,512	71,452
Mid East	73,630	79,227	187,181	208,870
South East	83,520	66,836	231,594	182,940

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Gross profit margin percentage:				
Mid Atlantic	17.6 %	18.7 %	18.4 %	18.8 %
North East	17.3 %	21.1 %	19.2 %	19.6 %
Mid East	18.2 %	19.5 %	18.3 %	18.9 %
South East	20.5 %	20.0 %	20.8 %	19.7 %

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Segment profit:				
Mid Atlantic	$ 104,700	$ 124,900	$ 284,440	$ 348,067
North East	14,272	13,164	31,081	36,187
Mid East	45,109	50,210	103,575	125,976
South East	52,554	39,721	142,463	105,582

Operating Activity:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020		2019		2020		2019	
	Units	Average Price	Units	Average Price	Units	Average Price	Units	Average Price
New orders, net of cancellations:								
Mid Atlantic	2,592	$ 455.5	2,086	$ 427.7	7,034	$ 447.4	6,852	$ 419.1
North East	542	$ 441.1	323	$ 379.0	1,269	$ 405.4	1,000	$ 378.9
Mid East	1,644	$ 335.5	1,141	$ 328.6	4,405	$ 326.0	3,631	$ 322.0
South East	1,903	$ 313.0	1,216	$ 304.2	4,889	$ 305.3	3,661	$ 301.6
Total	6,681	$ 384.2	4,766	$ 369.2	17,597	$ 374.5	15,144	$ 364.8

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020		2019		2020		2019	
	Units	Average Price	Units	Average Price	Units	Average Price	Units	Average Price
Settlements:								
Mid Atlantic	2,172	$ 437.1	2,421	$ 418.0	5,898	$ 434.6	6,890	$ 417.3
North East	396	$ 398.9	316	$ 381.3	939	$ 385.9	933	$ 391.0
Mid East	1,250	$ 324.0	1,255	$ 323.5	3,180	$ 322.5	3,382	$ 326.5
South East	1,362	$ 299.8	1,132	$ 295.6	3,689	$ 301.9	3,132	$ 296.6
Total	5,180	$ 370.8	5,124	$ 365.5	13,706	$ 369.5	14,337	$ 367.8

	As of September 30,			
	2020		2019	
	Units	Average Price	Units	Average Price
Backlog:				
Mid Atlantic	4,748	$ 457.7	4,110	$ 426.4
North East	917	$ 427.8	630	$ 383.3
Mid East	3,038	$ 333.2	2,055	$ 327.0
South East	3,421	$ 315.1	2,377	$ 310.0
Total	12,124	$ 384.0	9,172	$ 371.0

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
New order cancellation rate:				
Mid Atlantic	11.3 %	16.2 %	16.1 %	14.7 %
North East	8.1 %	13.9 %	14.5 %	12.3 %
Mid East	11.5 %	15.9 %	15.3 %	13.9 %
South East	13.7 %	15.0 %	16.3 %	14.2 %

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Average active communities:				
Mid Atlantic	170	201	183	208
North East	41	34	41	32
Mid East	135	136	138	131
South East	119	102	113	93
Total	465	473	475	464

Homebuilding Inventory:

	September 30, 2020	December 31, 2019
Sold inventory:		
Mid Atlantic	$ 752,793	$ 575,216
North East	133,008	77,965
Mid East	296,421	190,700
South East	323,304	230,640
Total (1)	$ 1,505,526	$ 1,074,521

	September 30, 2020	December 31, 2019
Unsold lots and housing units inventory:		
Mid Atlantic	$ 79,913	$ 104,459
North East	10,173	28,331
Mid East	11,398	15,333
South East	20,613	35,420
Total (1)	$ 122,097	$ 183,543

(1) The reconciling items between segment inventory and consolidated inventory include certain consolidation adjustments necessary to convert the reportable segments' results, which are predominantly maintained on a cash basis, to a full accrual basis for external financial statement presentation purposes. These consolidation adjustments are not allocated to our operating segments.

Lots Controlled and Land Deposits:

	September 30, 2020	December 31, 2019
Total lots controlled:		
Mid Atlantic	42,300	42,400
North East	9,900	9,900
Mid East	21,600	24,200
South East	29,400	28,400
Total	103,200	104,900

	September 30, 2020	December 31, 2019
Contract land deposits, net:		
Mid Atlantic	$ 208,869	$ 205,433
North East	32,911	50,348
Mid East	49,861	57,053
South East	92,306	106,523
Total	$ 383,947	$ 419,357

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Contract land deposit impairments (recoveries), net:				
Mid Atlantic	$ 114	$ (247)	$ 114	$ 42
North East	56	—	60	1,050
Mid East	(1)	41	293	50
South East	25	21	927	21
Total	$ 194	$ (185)	$ 1,394	$ 1,163

Mid Atlantic

Three Months Ended September 30, 2020 and 2019

The Mid Atlantic segment had an approximate $20,200, or 16%, decrease in segment profit in the third quarter of 2020 compared to the third quarter of 2019. The decrease in segment profit was driven by a decrease in segment revenues of approximately $62,600, or 6%, quarter over quarter. Segment revenues decreased due to a 10% decrease in the number of units settled, offset partially by a 5% increase in the average settlement price quarter over quarter. The decrease in the number of units settled was impacted by a 3% lower backlog unit balance entering the third quarter of 2020 compared to the backlog unit balance entering the third quarter of 2019, coupled with a lower backlog turnover rate quarter over quarter. The increase in the average settlement price was primarily attributable to a 7% higher average sales price of units in backlog entering the third quarter of 2020 compared to backlog entering the third quarter of 2019. The Mid Atlantic segment's gross profit margin percentage decreased to 17.6% in the third quarter of 2020 from 18.7% in the third quarter of 2019 due to increases in lumber and certain other commodity prices quarter over quarter.

Segment New Orders and the average sales price of New Orders increased 24% and 6%, respectively, in the third quarter of 2020 compared to the third quarter of 2019. New Orders increased despite a 16% decrease in the average number of active communities quarter over quarter, due to higher absorption rates attributable to favorable market conditions driven primarily by historically low mortgage interest rates and low resale inventory levels. The average sales price of New Orders was favorably impacted by the previously mentioned favorable market conditions which provided us some pricing power, as well as to a relative market shift in New Orders to higher priced communities within certain markets in the segment.

Nine Months Ended September 30, 2020 and 2019

The Mid Atlantic segment had an approximate $63,600, or 18%, decrease in segment profit in the first nine months of 2020 compared to the first nine months of 2019. The decrease in segment profit was driven by a decrease in segment revenues of approximately $312,000, or 11%, year over year. Segment revenues decreased due to a 14% decrease in the number of units settled, offset partially by a 4% increase in the average settlement price year over year. The decrease in the number of units settled was impacted by a 13% lower backlog unit balance entering 2020 compared to the backlog unit balance entering 2019, coupled with a lower backlog turnover rate year over year. The increase in the average settlement price was primarily attributable to a 4% higher average sales price of units in backlog entering 2020 compared to backlog entering 2019. The Mid Atlantic segment's gross profit margin percentage remained relatively flat in the first nine months of 2020 compared to the first nine months of 2019.

Segment New Orders and the average sales price of New Orders increased 3% and 7%, respectively, in the first nine months of 2020 compared to the first nine months of 2019. New Orders increased despite a 12% decrease in the average number of active communities year over year, primarily due to the increase in New Orders in the third quarter of 2020 as discussed above.

North East

Three Months Ended September 30, 2020 and 2019

The North East segment had an approximate $1,100, or 8%, increase in segment profit in the third quarter of 2020 compared to the third quarter of 2019 due primarily to an increase in segment revenues of approximately $37,500, or 31%, quarter over quarter. The increase in segment revenues was attributable to a 25% increase in the number of units settled and a 5% increase in the average settlement price quarter over quarter. The increases in units settled and the average settlement price were primarily attributable to a 24% higher backlog unit balance and a 5% higher average price of homes in backlog entering the third quarter of 2020 compared to the backlog unit balance and average price of homes in backlog entering the third quarter of 2019. The segment's gross profit margin percentage decreased to 17.3% in the third quarter of 2020 from 21.1% in the third quarter of 2019 due to increases in lumber and certain other commodity prices quarter over quarter.

Segment New Orders and the average sales price of New Orders increased 68% and 16%, respectively, in the third quarter of 2020 compared to the third quarter of 2019. New Orders increased due to higher absorption rates attributable to favorable market conditions driven primarily by historically low mortgage interest rates and low resale inventory levels and by a 20% increase in the average number of active communities quarter over quarter. The average sales price of New Orders was favorably impacted by the previously mentioned favorable market conditions which provided us some pricing power, as well as to a relative market shift in New Orders to higher priced communities within certain markets in the segment.

Nine Months Ended September 30, 2020 and 2019

The North East segment had an approximate $5,100, or 14%, decrease in segment profit in the first nine months of 2020 compared to the first nine months of 2019. Segment revenues decreased approximately $2,600, or 1%, year over year. The decrease in segment revenues was attributable to a 1% decrease in the average settlement price year over year due to a relative shift in settlements to lower priced markets within the segment. The segment's gross profit margin percentage decreased to 19.2% in the first nine months of 2020 from 19.6% in the first nine months of 2019 due to increases in lumber and certain other commodity prices year over year.

Segment New Orders and the average sales price of New Orders increased 27% and 7%, respectively, in the first nine months of 2020 compared to the first nine months of 2019. New Orders were higher primarily as a result of the increase in New Orders in the third quarter of 2020 as discussed above, coupled with a 25% increase in the average number of active communities year over year.

Mid East

Three Months Ended September 30, 2020 and 2019

The Mid East segment had an approximate $5,100, or 10%, decrease in segment profit in the third quarter of 2020 compared to the third quarter of 2019. Segment revenues were relatively flat quarter over quarter, as both the number of units settled and the average settlement price were flat quarter over quarter. The segment's gross profit margin percentage decreased to 18.2% in the third quarter of 2020 from 19.5% in the third quarter of 2019 due to increases in lumber and certain other commodity prices quarter over quarter.

Segment New Orders and the average sales price of New Orders increased 44% and 2%, respectively, in the third quarter of 2020 compared to the third quarter of 2019. New Orders increased due to higher absorption rates attributable to favorable market conditions driven primarily by historically low mortgage interest rates and low resale inventory levels.

Nine Months Ended September 30, 2020 and 2019

The Mid East segment had an approximate $22,400, or 18%, decrease in segment profit in the first nine months of 2020 compared to the first nine months of 2019 due primarily to a decrease in segment revenues of approximately $79,000, or 7%, year over year. Segment revenues decreased primarily due to a 6% decrease in the number of units settled and a 1% decrease in the average settlement price year over year. The decrease in units settled was largely attributable to a decrease in settlements in our Western Pennsylvania and New York markets due to the state and local governments in those markets issuing various orders that prohibited residential construction from the end of March through April 2020 as a result of the COVID-19 pandemic. The segment's gross profit margin percentage decreased to 18.3% in the first nine months of 2020 from 18.9% in the first nine months of 2019 due to increases in lumber and certain other commodity prices year over year.

Segment New Orders and the average sales price of New Orders increased 21% and 1%, respectively, in the first nine months of 2020 compared to the first nine months of 2019. New Orders were higher primarily as a result of the increase in New Orders in the third quarter of 2020 and by a 6% increase in the average number of active communities year over year.

South East

Three Months Ended September 30, 2020 and 2019

The South East segment had an approximate $12,800, or 32%, increase in segment profit in the third quarter of 2020 compared to the third quarter of 2019. The increase in segment profit was primarily driven by an increase in segment revenues of approximately $73,700, or 22%, coupled with improved gross profit margins quarter over quarter. The increase in revenues is attributable to a 20% increase in the number of units settled and a 1% increase in the average settlement price quarter over quarter. The number of units settled was favorably impacted by a 26% higher backlog unit balance entering the third quarter of 2020 compared to the same period in 2019. The segment's gross profit margin percentage increased to 20.5% in the third quarter of 2020 from 20.0% in the third quarter of 2019 due to a relative shift in settlements to higher margin communities.

Segment New Orders and the average sales price of New Orders increased 57% and 3%, respectively, in the third quarter of 2020 compared to the third quarter of 2019. New Orders increased due to higher absorption rates attributable to favorable market conditions driven primarily by historically low mortgage interest rates and low resale inventory levels and by a 17% increase in the average number of active communities quarter over quarter.

Nine Months Ended September 30, 2020 and 2019

The South East segment had an approximate $36,900, or 35%, increase in segment profit in the first nine months of 2020 compared to the first nine months of 2019. The increase in segment profit was primarily driven by an increase in segment revenues of approximately $184,800, or 20%, coupled with improved gross profit margins year over year. The increase in revenues is attributable to an 18% increase in the number of units settled and a 2% increase in the average settlement price year over year. The number of units settled and the average settlement price were favorably impacted by a 20% higher backlog unit balance and 3% higher average sales price of units in backlog entering 2020 compared to the same period in 2019. The segment's gross profit margin percentage increased to 20.8% in the first nine months of 2020 from 19.7% in the first nine months of 2019 due to a relative shift in settlements to higher margin communities.

Segment New Orders and the average sales price of New Orders increased 34% and 1%, respectively, in the first nine months of 2020 compared to the first nine months of 2019. New Orders were higher as a result of the increase in New Orders in the third quarter of 2020 as discussed above and by a 21% increase in the average number of active communities year over year.

Homebuilding Segment Reconciliations to Consolidated Homebuilding Operations

In addition to the corporate capital allocation and contract land deposit impairments discussed above, the other reconciling items between homebuilding segment profit and homebuilding consolidated income before tax include unallocated corporate overhead (which includes all management incentive compensation), equity-based compensation expense, consolidation adjustments and external corporate interest expense. Our overhead functions, such as accounting, treasury and human resources, are centrally performed and the costs are not allocated to our operating segments. Consolidation adjustments consist of such items to convert the reportable segments' results, which are predominantly maintained on a cash basis, to a full accrual basis for external financial statement presentation purposes, and are not allocated to our operating segments. Our external corporate interest expense primarily consists of interest charges on our Senior Notes, and is not charged to the operating segments because the charges are included in the corporate capital allocation discussed above.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Homebuilding consolidated gross profit:				
Mid Atlantic	$ 167,314	$ 189,535	$ 471,839	$ 540,060
North East	27,265	25,364	69,512	71,452
Mid East	73,630	79,227	187,181	208,870
South East	83,520	66,836	231,594	182,940
Consolidation adjustments and other (1)	32,978	(5,907)	(10,190)	(11,807)
Homebuilding consolidated gross profit	$ 384,707	$ 355,055	$ 949,936	$ 991,515

(1) The increase in our consolidation adjustments and other reconciling item for the three month period ended September 30, 2020 relates primarily to the significant increase in lumber prices during the third quarter of 2020. Our reportable segments' results include intercompany profits of our production facilities, which were negatively impacted by the increase in lumber costs. This increase in lumber costs related to homes not yet settled is eliminated through the consolidation adjustment. As these homes currently in inventory are settled in subsequent quarters, our consolidated homebuilding margins will be negatively impacted by the higher lumber costs. For the nine month period ended September 30, 2020, the increase in the consolidation adjustment due to higher lumber prices was offset by the lot deposit reserve recorded in the first quarter of 2020.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Homebuilding consolidated income before taxes:				
Mid Atlantic	$ 104,700	$ 124,900	$ 284,440	$ 348,067
North East	14,272	13,164	31,081	36,187
Mid East	45,109	50,210	103,575	125,976
South East	52,554	39,721	142,463	105,582
Reconciling items:				
Contract land deposit impairment reserve (1)	4,867	248	(31,208)	1,572
Equity-based compensation expense (2)	(12,561)	(19,335)	(33,398)	(56,773)
Corporate capital allocation (3)	60,662	57,887	177,184	168,621
Unallocated corporate overhead	(26,915)	(27,914)	(87,912)	(89,003)
Consolidation adjustments and other (4)	38,244	12,859	54,769	31,569
Corporate interest expense	(11,287)	(5,966)	(26,625)	(17,964)
Reconciling items sub-total	53,010	17,779	52,810	38,022
Homebuilding consolidated income before taxes	$ 269,645	$ 245,774	$ 614,369	$ 653,834

(1) This item represents changes to the contract land deposit impairment reserve, which are not allocated to the reportable segments. See further discussion of lot deposit impairment charges in Note 2 in the accompanying condensed consolidated financial statements.

(2) The decrease in equity-based compensation expense for the three and nine month periods ended September 30, 2020 was primarily attributable to stock options issued in 2014 under the 2014 Equity Incentive Plan becoming fully vested in 2019. In addition, stock compensation expense for both the three and nine month periods ended September 30, 2020 was favorably impacted by higher stock option forfeitures during 2020.

(3) This item represents the elimination of the corporate capital allocation charge included in the respective homebuilding reportable segments. The corporate capital allocation charge is based on the segment's monthly average asset balance, and is as follows for the periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Corporate capital allocation charge:				
Mid Atlantic	$ 31,383	$ 31,504	$ 92,720	$ 93,297
North East	5,793	5,028	17,142	14,381
Mid East	10,386	9,791	29,436	28,303
South East	13,100	11,564	37,886	32,640
Total	$ 60,662	$ 57,887	$ 177,184	$ 168,621

(4) The increase in our consolidation adjustments and other reconciling item for both the three and nine month periods ended September 30, 2020 relates primarily to the significant increase in lumber prices during the third quarter of 2020. Our reportable segments' results include intercompany profits of our production facilities, which were negatively impacted by the increase in lumber costs. The increase in lumber costs related to homes not yet settled is eliminated through the consolidation adjustment. As these homes currently in inventory are settled in subsequent quarters, our consolidated homebuilding margins will be negatively impacted by the higher lumber costs.

Mortgage Banking Segment

Three and Nine Months Ended September 30, 2020 and 2019

We conduct our mortgage banking activity through NVR Mortgage Finance, Inc. ("NVRM"), a wholly owned subsidiary. NVRM focuses exclusively on serving the homebuilding segment customer base. NVRM sells all of the mortgage loans it closes to investors in the secondary markets on a servicing-released basis, typically within 30 days from the loan closing. The following table summarizes the results of our mortgage banking operations and certain statistical data for the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Loan closing volume:				
Total principal	$ 1,382,060	$ 1,373,946	$ 3,658,591	$ 3,745,983
Loan volume mix:				
Adjustable rate mortgages	2 %	7 %	2 %	9 %
Fixed-rate mortgages	98 %	93 %	98 %	91 %
Operating profit:				
Segment profit	$ 52,890	$ 22,835	$ 80,461	$ 78,566
Equity-based compensation expense	(1,078)	(1,435)	(2,167)	(1,907)
Mortgage banking income before tax	$ 51,812	$ 21,400	$ 78,294	$ 76,659
Capture rate:	89 %	90 %	90 %	89 %
Mortgage banking fees:				
Net gain on sale of loans	$ 58,774	$ 27,771	$ 100,348	$ 95,690
Title services	10,237	10,005	26,755	28,297
Servicing fees	250	157	589	497
	$ 69,261	$ 37,933	$ 127,692	$ 124,484

Loan closing volume for the three months ended September 30, 2020 increased by approximately $8,100 or 1%, and decreased by approximately $87,400, or 2% for the nine months ended September 30, 2020 from the same periods in 2019. The increase in loan closing volume during the three months ended September 30, 2020 was primarily attributable to the 1% increase in the homebuilding segment's number of units settled during the three months ended September 30, 2020, compared to the same period in 2019. The decrease in loan closing volume during the nine months ended September 30, 2020 was primarily attributable to the 4% decrease in the homebuilding segment's number of units settled during the nine months ended September 30, 2020, compared to the same period in 2019.

Segment profit for the three and nine months ended September 30, 2020 increased by approximately $30,100, or 132%, and $1,900, or 2%, respectively, from the same periods in 2019. These increases were primarily attributable to increases in mortgage banking fees of approximately $31,300 and $3,200 for the three and nine months ended September 30, 2020, respectively, primarily due to an increase in secondary marketing gains on sales of loans.

Effective Tax Rate

Our effective tax rates during the three and nine months ended September 30, 2020 were 20.2% and 13.9%, respectively, compared to 16.2% and 14.8% for the three and nine months ended September 30, 2019, respectively. The effective tax rate in each period was favorably impacted by the recognition of an income tax benefit related to excess tax benefits from stock option exercises totaling $17,834 and $80,343 for the three and nine months ended September 30, 2020, respectively, and $27,604 and $86,809 for the three and nine months ended September 30, 2019, respectively.

We expect to experience volatility in our effective tax rate in future quarters as the amount of the excess tax benefit from equity-based awards is dependent on our stock price when awards are exercised as well as on the timing of exercises, which historically has varied from quarter to quarter.

Liquidity and Capital Resources

We had a very strong liquidity position as of September 30, 2020, with approximately $2,500,000 in cash and cash equivalents, approximately $188,550 in unused committed capacity under our revolving credit facility and $150,000 in unused committed capacity under our revolving mortgage repurchase facility.

Our homebuilding business segment funds its operations from cash flows provided by operating activities, a short-term unsecured working capital revolving credit facility and capital raised in the public debt and equity markets.

2030 Senior Notes

On May 4, 2020, we issued $600,000 of 3.00% Senior Notes due 2030 (the "2030 Senior Notes"). The 2030 Senior Notes were issued at a discount to yield 3.02% and have been reflected net of the unamortized discount and unamortized debt issuance costs in the accompanying condensed consolidated balance sheet. The offering of the 2030 Senior Notes resulted in aggregate net proceeds of approximately $595,300, after deducting underwriting discount and offering expenses. The 2030 Senior Notes mature on May 15, 2030 and bear interest at 3.00%, payable semi-annually in arrears on May 15 and November 15. The 2030 Senior Notes are senior unsecured obligations and rank equal in right of payment to all of our existing and future unsecured senior indebtedness and other obligations that are not, by their terms, expressly subordinated in right of payment to the 2030 Senior Notes.

On September 9 and September 17, 2020, we issued an additional $250,000 and $50,000, respectively, of its 2030 Senior Notes (the "Additional Senior Notes"). The Additional Senior Notes were issued at a premium to yield 2.00% and have been reflected net of the unamortized premium and unamortized debt issuance costs in the accompanying condensed consolidated balance sheet. The offering of the Additional Senior Notes resulted in aggregate net proceeds of approximately $323,900, including the underwriting premium, less offering expenses. The Additional Senior Notes form a single series with the 2030 Senior Notes and have substantially identical terms as the 2030 Senior Notes.

Credit Agreement

We have an unsecured Credit Agreement (the “Credit Agreement”) which provides for aggregate revolving loan commitments of $200,000 (the "Facility"). Under the Credit Agreement, we may request increases of up to $300,000 to the Facility in the form of revolving loan commitments or term loans to the extent that new or existing lenders agree to provide additional revolving loan or term loan commitments. The Credit Agreement provides for a $100,000 sublimit for the issuance of letters of credit, of which there was approximately $11,450 outstanding at September 30, 2020, and a $25,000 sublimit for a swing line commitment. The Credit Agreement termination date is July 15, 2021. There was no debt outstanding under the Facility at September 30, 2020.

Repurchase Agreement

Our mortgage banking subsidiary, NVRM, provides for its mortgage origination and other operating activities using cash generated from its operations, borrowings from its parent company, NVR, as well as a $150,000 revolving mortgage repurchase facility (the “Repurchase Agreement”), which is non-recourse to NVR. In July 2020, NVRM entered into the Twelfth Amendment to the Repurchase Agreement, which extended the term of the Repurchase Agreement through July 21, 2021. All other terms and conditions under the amended Repurchase Agreement remained materially consistent. At September 30, 2020, there were no borrowing base limitations reducing the amount available under the Repurchase Agreement. There was no debt outstanding under the Repurchase Agreement at September 30, 2020.

For additional information regarding lines of credit and notes payable, see Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2019.

Cash Flows

For the nine months ended September 30, 2020, cash, restricted cash, and cash equivalents increased by $1,431,671. Cash provided by operating activities was $579,340. Cash was provided by earnings for the nine months ended September 30, 2020 and net proceeds of $250,780 from mortgage loan activity. Cash was primarily used to fund the increase in homebuilding inventory of $416,488 due to an increase in the number of units under construction at September 30, 2020 compared to December 31, 2019.

Net cash used in investing activities for the nine months ended September 30, 2020 was $12,099 primarily due to cash used for purchases of property, plant and equipment of $12,329.

Net cash provided by financing activities for the nine months ended September 30, 2020 was $864,430 due primarily to the net proceeds received from the issuance of the 2030 Senior Notes, as discussed above, and $162,522 provided from stock option exercise proceeds. Cash was used during the period to repurchase 57,611 shares of our common stock at an aggregate purchase price of $216,582, all of which were repurchased in the first quarter, under our ongoing common stock repurchase program discussed below.

Equity Repurchases

In addition to funding growth in our homebuilding and mortgage banking operations, we historically have used a substantial portion of our excess liquidity to repurchase outstanding shares of our common stock in open market and privately negotiated transactions. This ongoing repurchase activity is conducted pursuant to publicly announced Board authorizations, and is typically executed in accordance with the safe-harbor provisions of Rule 10b-18 promulgated under the Exchange Act. In addition, the Board resolutions authorizing us to repurchase shares of our common stock specifically prohibit us from purchasing shares from our officers, directors, Profit Sharing/401(k) Plan Trust or Employee Stock Ownership Plan Trust. The repurchase program assists us in accomplishing our primary objective of creating increases in shareholder value. We did not repurchase any outstanding shares of our common stock during the third quarter of 2020.

Critical Accounting Policies

There have been no material changes to our critical accounting policies as previously disclosed in Part II, Item 7, of our Annual Report on Form 10-K for the year ended December 31, 2019.

Item 3. Quantitative and Qualitative Disclosure about Market Risk

There have been no material changes in our market risks during the nine months ended September 30, 2020. For additional information regarding our market risks, see Part II, Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2019.

Item 4. Controls and Procedures

As of the end of the period covered by this report, an evaluation was performed under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Exchange Act Rule 13a-15. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that the design and operation of these disclosure controls and procedures were effective. There have been no changes in our internal control over financial reporting in the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We are involved in various litigation arising in the ordinary course of business. In the opinion of management, and based on advice of legal counsel, this litigation is not expected to have a material adverse effect on our financial position, results of operations or cash flows. Legal costs incurred in connection with outstanding litigation are expensed as incurred.

Item 1A. Risk Factors

We are supplementing the risk factors described under "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2019 with the additional risk factor set forth below, which supplements, and to the extent inconsistent, supersedes such risk factors.

Health epidemics, including the recent COVID-19 pandemic, have had, and could in the future have, an adverse impact on our business and operations, and the markets, states and local communities in which we operate.

Our business and operations could be adversely affected by health epidemics, including the recent COVID-19 pandemic, impacting the markets, states and local communities in which we operate. The COVID-19 pandemic has been declared a national emergency. Efforts to contain the virus have led to significant disruptions to commerce, increased unemployment, lower consumer confidence and consumer demand for goods and services and general uncertainty regarding the near-term and long-term impact of the COVID-19 virus on the domestic and international economy and on public health. These developments and other consequences of the outbreak could materially and adversely affect our operations, profitability and cash flows.

The duration, severity, and scope of the COVID-19 outbreak is highly uncertain. The COVID-19 pandemic has adversely impacted and may continue to adversely impact our business. To date, our primary focus as we face this challenge has been to do everything we can to ensure the safety and well-being of our employees, customers and trade partners.

Homebuilding: State governments in every market where we operate have instituted social distancing and other restrictions, which have resulted in significant changes to the way we conduct business. We are operating in accordance with the guidelines issued by the Centers for Disease Control and Prevention, as well as state and local guidelines, in all of our markets.

Mortgage: We are operating in accordance with state and local guidelines with respect to our mortgage banking and settlement services activities. As a result of the COVID-19 pandemic, the mortgage market experienced significant disruption earlier in 2020 as investors tightened their credit standards or exited the market.

The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. There is uncertainty regarding governmental actions that may occur, and the effects of economic relief efforts on the U.S. economy, either of which could be potential disruptors to our business. Over the long term, these disruptions related to COVID-19 could lower demand for our products, impair our ability to sell and/or build homes in our normal manner, increase our losses on contract land deposits, and negatively impact our lending and secondary mortgage market activities.

The full extent to which the COVID-19 pandemic will affect our operations cannot be predicted at this time, including, but not limited to, the duration and severity of the outbreak, governmental reactions and policies, the impact of such on our employees, customers and trade partners, and the length of time required for normal economic and operating conditions to resume. While the spread of COVID-19 may eventually be mitigated, there is no guarantee that a future outbreak of this or any other widespread epidemics will not occur, or that the U.S. economy will recover, either of which could seriously harm our business.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(in thousands)

We had two share repurchase authorizations outstanding during the quarter ended September 30, 2020. On November 6, 2019 and February 12, 2020, we publicly announced that our Board of Directors authorized the repurchase of our outstanding common stock in one or more open market and/or privately negotiated transactions, up to an aggregate of $300,000 per authorization. The repurchase authorizations do not have expiration dates. We did not repurchase any shares of our common stock during the third quarter of 2020. As of September 30, 2020, we had a total of $400,559 available under the outstanding repurchase authorizations.

Item 6. Exhibits

Exhibit Number	Exhibit Description	Form	Incorporated by Reference File Number	Exhibit Number	Filing Date
4.1	Seventh Supplemental Indenture dated September 9, 2020 between NVR, Inc. and U.S. Bank Trust National Association.	8-K		4.1	9/9/2020
4.2	Eighth Supplemental Indenture dated September 17, 2020 between NVR, Inc. and U.S. Bank Trust National Association.	8-K		4.1	9/17/2020
10.1	Extension of Employment Agreement between NVR, Inc. and Paul C. Saville dated November 4, 2020. Filed herewith.				
10.2	Extension of Employment Agreement between NVR, Inc. and Daniel D. Malzahn dated November 4, 2020. Filed herewith.				
10.3	Extension of Employment Agreement between NVR, Inc. and Paul W. Praylo dated November 4, 2020. Filed herewith.				
10.4	Extension of Employment Agreement between NVR, Inc. and Eugene J. Bredow dated November 4, 2020. Filed herewith.				
31.1	Certification of NVR's Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. Filed herewith.				
31.2	Certification of NVR's Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. Filed herewith.				
32	Certification of NVR's Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. Filed herewith.				
99.1	NVR Third Quarter 2020 Earnings Release dated October 20, 2020	8-K		99.1	10/20/2020
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				
101.SCH	XBRL Taxonomy Extension Schema Document				
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).				

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

NVR, Inc.

Date: November 4, 2020	By:	/s/ Daniel D, Malzahn
		Daniel D. Malzahn
		Senior Vice President, Chief Financial Officer and Treasurer

November 4, 2020

Paul Saville

[Address on File]

Re: Extension of Employment Agreement

Dear Paul:

This letter confirms our agreement that the Amended and Restated Employment Agreement dated November 4, 2015 (the “Agreement”) between NVR, Inc. and you will be extended, pursuant to Sections 2 and 8.3 of the Agreement, through December 31, 2025, with no other changes made to the Agreement. Kindly sign below to confirm your agreement to this extension.

Sincerely,

/s/ Gary Brown

Gary Brown
Senior Vice President, Human Resources

Agreed and accepted:

/s/ Paul C. Saville

Paul C. Saville
Dated: November 4, 2020

November 4, 2020

Daniel Malzahn

[Address on File]

Re: Extension of Employment Agreement

Dear Dan:

This letter confirms our agreement that the Amended and Restated Employment Agreement dated November 4, 2015 (the “Agreement”) between NVR, Inc. and you will be extended, pursuant to Sections 2 and 8.3 of the Agreement, through December 31, 2025, with no other changes made to the Agreement. Kindly sign below to confirm your agreement to this extension.

Sincerely,

/s/ Gary Brown

Gary Brown
Senior Vice President, Human Resources

Agreed and accepted:

/s/ Daniel D. Malzahn

Daniel D. Malzahn
Dated: November 4, 2020

November 4, 2020

Paul Praylo

[Address on File]

Re: Extension of Employment Agreement

Dear Paul:

This letter confirms our agreement that the Amended and Restated Employment Agreement dated January 28, 2019 (the "Agreement") between NVR, Inc. and you will be extended, pursuant to Sections 2 and 8.3 of the Agreement, through December 31, 2025, with no other changes made to the Agreement. Kindly sign below to confirm your agreement to this extension.

Sincerely,

/s/ Gary Brown

Gary Brown
Senior Vice President, Human Resources

Agreed and accepted:

/s/ Paul W. Praylo

Paul W. Praylo
Dated: November 4, 2020

November 4, 2020

Eugene Bredow

[Address on File]

Re: Extension of Employment Agreement

Dear Gene:

This letter confirms our agreement that the Amended and Restated Employment Agreement dated November 4, 2015 (the "Agreement") between NVR, Inc. and you will be extended, pursuant to Sections 2 and 8.3 of the Agreement, through December 31, 2025, with no other changes made to the Agreement. Kindly sign below to confirm your agreement to this extension.

Sincerely,

/s/ Gary Brown

Gary Brown
Senior Vice President, Human Resources

Agreed and accepted:

/s/ Eugene J. Bredow

Eugene J. Bredow
Dated: November 4, 2020

Exhibit 31.1

SARBANES-OXLEY ACT SECTION 302 CERTIFICATIONS

I, Paul C. Saville, certify that:

1. I have reviewed this report on Form 10-Q of NVR, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 4, 2020

By: /s/ Paul C. Saville
Paul C. Saville
President and Chief Executive Officer

Exhibit 31.2

SARBANES-OXLEY ACT SECTION 302 CERTIFICATIONS

I, Daniel D. Malzahn, certify that:

1. I have reviewed this report on Form 10-Q of NVR, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 4, 2020

By: /s/ Daniel D. Malzahn
Daniel D. Malzahn
Senior Vice President, Chief Financial Officer and Treasurer

Exhibit 32

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of NVR, Inc. for the period ended September 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of NVR, Inc., hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of NVR, Inc.

Date: November 4, 2020

By: /s/ Paul C. Saville
Paul C. Saville
President and Chief Executive Officer

By: /s/ Daniel D. Malzahn
Daniel D. Malzahn
Senior Vice President, Chief Financial Officer and Treasurer