

# **Construction materials and home improvement sector in Georgia**



# Georgia | Construction materials and home improvement sector

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# **Terms and definitions**

Average ticket size - average value of transaction

CAGR - compound annual growth rate

COGS - cost of goods sold

**CIS** - Commonwealth of Independent States

DIY stores - do it yourself stores

EBITDA – earnings before interest, taxes, depreciation and amortization

**EU** – European Union

GDP - gross domestic product

Geostat - National Statistics Office of Georgia

FY - fiscal year

NBG - National Bank of Georgia

# Classification

**Construction materials sector** combines heavyside materials, such as cement, concrete, asphalt concrete, re-bar and other products.

Home improvement sector combines following sub-sectors:

- Renovation materials lightside materials, such as tubes & pipes, doors & windows, ceramic flags, wood products, wires & cables, bathroom & sanitary, etc.
- Household appliances heating & cooling and electronic durable goods, excluding telephones and computers.
- Furniture & lighting furniture and lighting products.



# **Executive summary**

We estimate market size of construction materials and home improvement sector at US\$ 3.4bn in 2021, posting CAGR of 5.2% over 2017-21 (+12.0% in GEL). Out of this, construction materials market size is US\$1.3bn and home improvement sector size is US\$ 2.1bn.

Local production meets large portion of demand in construction materials sector (e.g. cement, concrete, re-bar, steel and other products, which are generally produced within the country due to its high transportation costs). Meanwhile, local production of renovation materials and furniture & lighting remains limited, despite positive developments of recent years.

Before suffering due to COVID-19 pandemic-driven crisis in 2020, the construction materials and home improvement sector had experienced a favorable environment - receiving boost from solid public infrastructure spending, tourism boom and related hotel expansion activity, strong residential construction fundamentals and real estate being most attractive investments. The construction material and home improvement sector rebounded quickly in 2021, boosted by reopening of the economy and pent-up demand, as well as increased consumer preferences for comfortable housing. Continued strong economic growth and rent market demand spike further supported the sector in 2022 despite high interest rate environment and high prices.

In coming years, we expect construction materials and home improvement sector to continue robust growth aided by solid public infrastructure pipeline, strong fundamentals in residential construction as well as boost from migration and revived hospitality investments. We believe that the key risks to our forecasts are: 1) longer than expected period of high interest rates environment and high inflation, 2) sudden reversal in migration trends and 3) geopolitical conflicts.

Our key conclusions are as follows:

**Solid growth profile:** Our analysis reveals that sector is facing strong residential, non-residential and infrastructure construction spending, resulting in a 5-10% annual growth in the next 5 years, which is in line with previous 5-year growth profile.

**Infrastructure pipeline remains solid**: Public infrastructure investments are planned at 7.0% of GDP over 2023-26, down from c. 8.0% in previous 5 years, but it is still solid by global and regional standards. This slowdown is mostly explained by completion stage of East-West Highway project, but we expect other new large scale programs to commence (roads, critical municipal infrastructure), which are not currently reflected in medium-term budget framework.



Residential and non-residential fundamentals remain healthy: The main drivers of residential construction are healthy demand driven by urbanisation, household formation and housing renewal trends, combined with additional boost from migration impact. Non-residential construction expected to receive boost from general economic development creating demand for new construction formats (e.g. trade centers, logistics facilities, business centers, HPPs, etc.).

Georgian companies enjoy higher profitability compared to many European and Asian peers indicating room for competition. Notably, many companies started to expand operations shifting to DIY retail formats.

**Construction materials suppliers** benefit from growing construction, but generally face volatile demand because of dependence on large infrastructure projects.

**Home improvement product suppliers** generally outperform other sub-sectors as they are flexible on changing demand dynamics by building inventories and cutting imports.

# Report methodology

In this report, we analyze the construction materials and home improvement sector, which depends on residential, non-residential and infrastructure construction. We focus on both the heavyside and lightside construction materials, household appliance and furniture & lighting using official statistics as well as in-house analysis and estimations.

Key numbers in this report:

- US\$ 3.4bn construction materials and home improvement market covered.
- Focusing on 4 key sub-sectors: construction materials, renovation materials, household appliances, and furniture & lighting.
- Analysis covers 20,000 companies involved in 35 production and 19 trade activities of construction materials and home improvement products.
- External trade analysis covers 900 products, which we identified relevant for construction materials and home improvement sector analysis.
- Audited financial statements of over 70 medium and large-sized companies analyzed in detail. We compared Georgian companies' financial performance with over 400 companies operating in Europe and Asia.

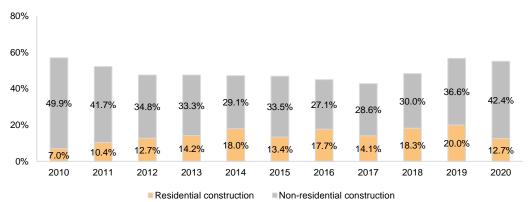


# Sector overview

# Market size

Construction is one of the major contributors to economic growth in Georgia, with its share to GDP at 8.0% in 2012-21, one of the highest compared to peer countries. Residential and non-residential (including infrastructure) construction contributes c. 50% of gross capital formation in the economy of Georgia, creating demand on construction materials and home improvement sector.

Figure 1: Construction spending as % of gross capital formation



Source: Geostat, Galt & Taggart Research

The sector combines local producers, wholesalers and retailers that are offering wide range of products. Despite, very subtle differences among subsectors, we classify sector in two parts: 1) construction materials sector (heavyside) and 2) home improvement sector. The latter combines renovation materials (i.e. lightside materials that could also be used in the construction process of the buildings, but are generally sold in home improvement stores), household appliances and furniture & lighting. The sector is import intensive and prices are mostly quoted in dollars, and therefore in this report we make most calculations in US dollar terms, when relevant, as GEL volatility over years distorts the analysis.

We estimate market size of construction materials and home improvement sector at US\$ 3.4bn in 2021, posting CAGR of 5.2% over 2017-21 (+12.0% in GEL terms). Out of this, construction materials market size is US\$1.3bn and home improvement sector size is US\$ 2.1bn.



Box 1: Market size of construction materials and home improvement sector in Georgia, 2021

### **Total sector** US\$ 3.4bn Home improvement **Construction materials** US\$ 2.1bn (heavyside) US\$ 1.3bn Household Furniture & **Renovation materials** (lightside) appliances lighting US\$ 1.5bn US\$ 0.3bn US\$ 0.3bn Cement Tubes & pipes Heating Furniture Concrete Doors & windows Cooling lighting Asphalt concrete Wires & cables TV sets Re-bar Ceramic flags Ovens Steel (other than re-bar) Working tools Refrigerators Gravel Bathroom & sanitary Other products Other products Other products

Source: Geostat, Galt & Taggart Research

COVID-19 and associated economic crisis of 2020 affected everyone involved in the construction business — construction companies, developers, investors, construction material retailers, etc. Consequently, construction materials and home improvement sector turnover was down 7.0% y/y to US\$ 2.8bn in 2020. However, demand rebounded quickly in 2021 and the sector grew impressively by 24.0% y/y to US\$ 3.5bn. Importantly, sector turnover recovery was also related to price spikes in Georgia similar to global trends.

Table 1: Turnover of Construction materials and home improvement sector in Georgia, US\$ bn

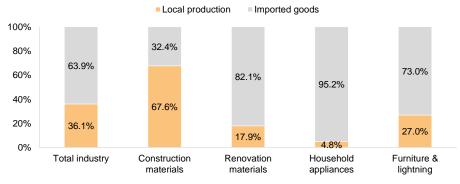
	2017	2018	2019	2020	2021	% growth, 2020 vs 2019	% growth, 2021 vs 2020	CAGR in US\$, 2017-21	CAGR in GEL, 2017-21
Total	2.8	3.0	2.9	2.7	3.4	-6.6%	24.3%	5.2%	12.0%
Construction materials	1.0	1.0	1.1	1.0	1.3	-5.3%	26.3%	6.4%	13.2%
Home improvement products	1.8	2.0	1.9	1.7	2.1	-7.4%	23.2%	4.6%	11.3%
Renovation materials	1.1	1.3	1.2	1.2	1.5	-3.9%	28.5%	7.6%	14.6%
Household appliances	0.3	0.4	0.3	0.3	0.3	-16.2%	14.8%	-1.3%	5.1%
Furniture & Lighting	0.3	0.3	0.3	0.3	0.3	-11.6%	9.1%	-1.4%	5.0%
Total	2.8	3.0	2.9	2.7	3.4	-6.6%	24.3%	5.2%	12.0%
Local production	1.0	1.0	1.1	1.0	1.2	-5.5%	22.1%	5.2%	12.0%
Trade	1.8	2.0	1.9	1.7	2.2	-7.3%	25.7%	5.3%	12.0%

Source: Geostat, Galt & Taggart Research Note: exported goods included in production



Local production in construction materials and home improvement sector is low despite positive changes of recent years. The local output accounted for 36.1% of total sector value in 2021, and this share has remained flat over 2017-21, as import also grew strongly. Naturally, dependence on imported goods is the lowest (local production at 67.6%) in construction materials sector (cement, concrete, re-bar, steel and other products, which are generally produced within the country due to high transportation costs), while local production of renovation materials, household appliances and furniture & lighting remains limited (local production accounted for 17.9%, 4.8% and 27.0% of total revenue, respectively).

Figure 2: Local production and import breakdown by sector, US\$

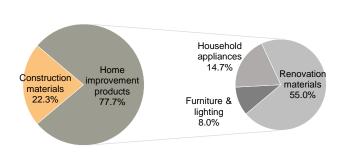


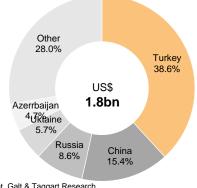
Source: Geostat, Galt & Taggart Research Note: Exported goods included in production

Total import of construction materials and home improvement products increased by 27.4% y/y to US\$ 1.8bn in 2021, after reducing by 14.9% y/y in 2020 due to weak demand. Majority of import is home improvement products - 77.7% of total out of US\$ 1.8bn imports (of which renovation materials 55.0%, household appliances 14.7% and furniture & lighting 8.0%). The rest import is construction materials (steel products, re-bar, clinker, cement, etc.). In 2021, main import partner was Turkey (38.6% of total in 2021), followed by China (15.4%), Russia (8.6%), Azerbaijan (4.7%), Iran (4.7%) and others countries (28.0%).

Box 2: Import of construction materials and home improvement products in Georgia, US\$ bn

Figure 3: Breakdown by categories, 2021 Figure 4: Breakdown by countries, 2021





Source: Geostat, Galt & Taggart Research

Note: see Annex 1 for details

Source: Geostat, Galt & Taggart Research Note: see Annexes 3 & 4 for details



# Price analysis

Global demand for construction materials and home improvement products suffered in 2020 due to Covid-19. Demand recovery in 2021 was accompanied by supply shortages due to continued lockdowns and supply chain disruptions. Consequently, global commodity prices rose in 2021 and increased further on the onset of the Russia-Ukraine war, reflecting expected supply chain disruptions and energy crisis, and later western sanctions on Russia's production (e.g. Russia is a major producer of copper and aluminum). However, the prices started to subside after countries found alternative suppliers. Additionally, recession fears in Europe, weak demand in China due to real estate crisis and Zero-Covid Policy soften commodity prices further. Subsequently, prices of commodities are on a path of stabilization (see table 2), except coal, which reflects the panic over winter following Gazprom's indefinite halt of gas supplies to Europe.

Transportation costs are also getting back to pre-pandemic levels. Notably, global container freight index was up 7-8x compared to pre-pandemic period over 2021-1H22, due to supply chain collapse. However, situation gradually stabilized and transportation costs are almost back to normal.

Table 2: Price dynamics of commodities, energy materials and transportation

Commodities	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22
Coal, US\$/metric ton	68	55	52	66	87	107	166	184	267	366	418
Iron ore, US\$ ton	89	93	117	134	166	198	165	109	141	139	105
Copper, US\$/ton	5,120	4,860	5,880	6,540	7,740	8,820	8,600	8,760	9,100	8,660	7,000
Aluminum, US\$/metric ton	1,696	1,507	1,715	1,922	2,093	2,402	2,647	2,759	3,261	2,877	2,356
Zinc, US\$/metric ton	2,125	1,971	2,342	2,630	2,753	2,918	2,995	3,342	3,738	3,885	3,269
Energy	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22
Energy	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21		1Q22	2Q22	3Q22
Energy Natural gas, US\$/mmcm	1 <b>Q20</b>	<b>2Q20</b>	<b>3Q20</b> 9	<b>4Q20</b>	1 <b>Q21</b> 22	<b>2Q21</b>	<b>3Q21</b> 56	<b>4Q21</b> 106	<b>1Q22</b> 109	<b>2Q22</b> 105	<b>3Q22</b> 197
Natural gas, US\$/mmcm Brent oil, US\$/bbl	11 51	6 33	9 43	17 45	22 61	30 69	56 73	106	109 98	105 112	197 98
Natural gas, US\$/mmcm	11	6	9	17	22	30	56	106	109	105	197

Source: Bloomberg, Freightos Note 1: all prices are as of September 30 Note 2: See Annex 5 for details Prices also climbed in Georgia, reflecting high dependence on imports. Import prices for selected products such as furniture, wood, plastic, basic and fabricated metals have been on an upward trajectory since the beginning of the pandemic. Import prices accelerated in 1H21, reaching all-time high in the beginning of 2022. However, the prices started stabilization since 2Q22 due to reduction in commodity price and transportation costs.

Figure 5: Import price index for selected products in Georgia (GEL), Jan-2020=100

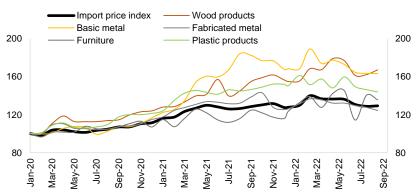


Table 3: Index change, Sep-22 y/y change Change compared to Jan-20 Import price index 0.6% 29.3% Wood products 7.9% 67.2% Plastic products 43.8% -1.8% Basic metal -10.4% 63.4% Fabricated metal -10.3% 24.4% Furniture 8.7% 35.7%

Source: Geostat, Galt & Taggart Research

Global reduction in prices along with GEL's appreciation against dollar and other regional currencies' expected to reduce prices further with a time lag.

Figure 6: GEL daily exchange rate against US\$ and Euro



Table 4: GEL exchange rate change, Sep-22

	y/y change	Change compared to Jan-20
US\$/GEL	-8.5%	-1.1%
EUR/GEL	-22.9%	-11.6%

Note: "-"means GEL appreciation.



# **Demand drivers**

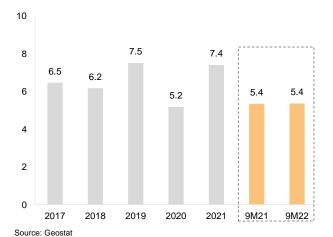
Construction material and home improvement sector depends on construction activity in residential & commercial real estate sectors, as well as civil engineering & utility projects. Growing demand of construction materials and home improvement products in recent years is evidenced by permit issuance for construction of residential and nonresidential buildings, real estate sales and state's infrastructure investments.

Construction permits were up 42.8% y/y to 7.4mn m<sup>2</sup> in 2021 after 30.9% decline in 2020 – almost fully recovering to pre-pandemic level.

Tbilisi accounted for 67.8% of total permitted construction area in 2021 (up from 44.3% in 2020). Adjara accounted for 7.7% of total permitted construction area, down from 26.8% of total in 2020. This drop in Adjara could be attributed to deteriorated expectations on tourism sector related to pandemic and scarcity of suitable land for residential development.

By construction type, permits issued for residential construction accounted for 79.9% of total issuance in 2021, up from 64.9% in 2017. Notably, Construction permits for other building categories (trade, industrial) are almost flat over years. Notably, permits issued for hotels collapsed to 0.2mn m2 or 3.0% of total issuance in 2021 (1.0mn m2 or 15.6% in 2017) due to deteriorated sentiments among hospitality investors. Notably, hospitality permit issuance drop could be problematic for the construction materials and home improvement sector, especially for household appliances (e.g. HVAC appliances), furniture and lighting sector.

Figure 7: Construction permit issuance in Georgia, mn m<sup>2</sup>



			•	•			
	2017	2018	2019	2020	2021	9M21	9M22
Total	6.5	6.2	7.5	5.2	7.4	5.4	5.4
Tbilisi	3.3	2.5	2.8	2.3	5.0	3.5	3.3
Adjara	1.8	2.3	3.0	1.4	0.6	0.4	0.6
Others	1.4	1.4	1.7	1.5	1.8	1.5	1.4
Total	6.5	6.2	7.5	5.2	7.4	5.4	5.4
Residential	4.2	4.5	5.5	3.7	5.9	4.3	4.1
Trade	0.3	0.3	0.3	0.2	0.3	0.2	0.3
Industrial	0.3	0.3	0.4	0.3	0.4	0.3	0.3
Hotels	1.0	0.6	0.8	0.5	0.2	0.1	0.3
Others	0.7	0.5	0.6	0.5	0.6	0.5	0.4

Table 5: Permit issuance breakdown by region and type, mn m<sup>2</sup>

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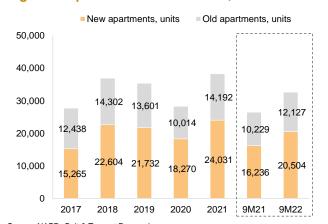
Real estate sales boost demand especially in home improvement sector: renovation (i.e. lightside) materials, household appliances and furniture & lighting.

Tbilisi and Batumi real estate markets were hit hard by Covid-19 in 2020. Demand was heavily impacted due to deteriorated economic outlook and accompanied uncertainty (especially in Batumi as non-residents constitute notable share of sales), however, thanks to healthy fundamentals and state subsidy scheme on interest payments, market remained resilient.

Residential real estate sales recovered stronger than expected in 2021. Apartment sales stood at 38,223 units (+35.1% v/y or +8.2% vs 2019) in Tbilisi and at 12,110 (+43.8% y/y or -0.7% vs 2019) in Batumi.

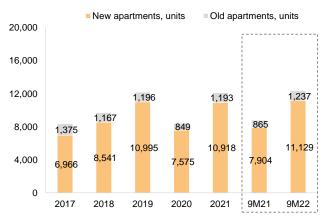
Apartment sales continued double-digit growth in 9M22, despite uncertainty and economic instability during the onset of Russia-Ukraine war. Strong demand on housing was supported by influx of foreigners (mainly from Russia, Ukraine and Belarus) relocating to Georgia for longer period than regular tourists. This also lifted up demand for renovation materials, furniture & lighting and household appliance sectors. Additionally, housing rents skyrocketed since Apr-22 (housing rents up 70-80% y/y). These high yields attracted real estate investors to buy, refurbish and rent even old apartments. We expect, demand on apartments to remain elevated due to healthy fundamentals (urbanization growth, family size decrease, lack of investment alternatives, purchases by emigrants, etc.) and increased investment attractiveness of real estate.

Figure 8: Apartment sales in Tbilisi, units



Source: NAPR, Galt & Taggart Research Note: new apartment include sales in projects that were built with permits issued since 2012

Figure 9: Apartment sales in Batumi, units



Source: NAPR, Galt & Taggart Research

Note: new apartment include sales in projects that were built with permits issued since 2012



State's expenditures on infrastructure - spending on infrastructure creates demand on construction materials such as cement, concrete, asphalt concrete, re-bars, etc.

Infrastructure pipeline remains solid: Public infrastructure investments (central and local budgets combined) are planned at 7.0% of GDP over 2023-26, down from c. 8.0% in previous 5 years, which is still solid by global and regional standards. This slowdown is mostly explained by completion stage of East-West Highway project, but we expect other new large scale programs to commence (roads, critical municipal infrastructure), which are not currently reflected in mediumterm budget framework.

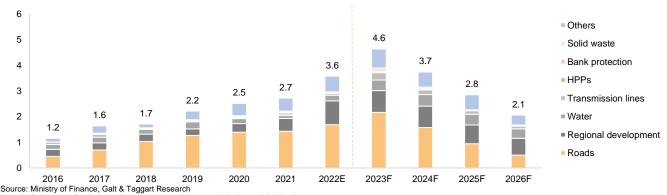
Figure 10: Public capital expenditures as % of GDP



Source: Ministry of Finance, Galt & Taggart Research

Central government's capital expenditures on infrastructure projects are expected to grow by 28.4% y/y to GEL 4.6bn in 2023, according to the draft 2023 state budget document, currently discussed at the parliament. Notably, spending on road construction projects is planned at GEL 2.2bn accounting for 46.7% of total capital expenditures on public infrastructure in 2023. Top 4 projects from 2022 to 2025, with over GEL 5.0bn investment are: 1) periodic maintenance & rehabilitation of motorways, 2) construction of the Tbilisi-Bakurtsikhe-Tsnori highway, 3) Regional rehabilitation program, and 4) Construction of Kvesheti-Kobi highway and tunnel.

Figure 11: State capital expenditures on infrastructure projects in Georgia, GEL bn



Note: includes spending by central government and does not include municipal budgets





# Construction materials

Construction materials sector is dominated by the local production (US\$ 0.9bn vs US\$ 0.4bn of imported goods), which is natural due to inconvenient and costly transportation. Cement, concrete and asphalt concrete are almost fully produced in Georgia, while local production of re-bar accounts for c. 75% of total demand. Local production of other products (clinker, gravel, blocks, and steel products) accounted for 40% of total demand in 2021.

Table 6: Local production of selected construction materials in Georgia, 2021

	Cement	Concrete	Asphalt concrete	Re-bar	Other products	Total
Share of local production in total demand	93%	c. 100%	c. 100%	75%	c. 40%	68%

Source: Geostat, Galt & Taggart Research

Demand for cement, concrete, asphalt concrete and re-bar was naturally affected by the pandemic related restrictions. However, demand on these products rebounded quickly once economy reopened. Prices of cement and concrete were stable over 2020-21, but spiked in 2022 due to increased production costs. Meanwhile, prices of re-bar were volatile over 2020-21 reaching record highs, but started to stabilize since 2H22. Local demand outlook remains healthy as planned public infrastructure projects and recovered construction permit issuance creates favourable circumstances for the sector.

# Overview of cement market

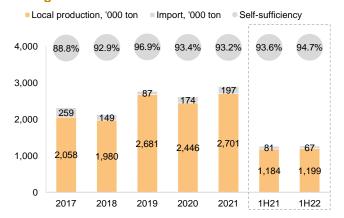
Total demand (production + imports - exports) for cement steadily grew over 2017-21 – CAGR of 5.8% to 2.9mn tons in 2021. Notably, demand for cement suffered due to temporary restrictions on construction activity in 2020 (-5.3% y/y). However, rebound was solid in 2021 (+10.6% y/y). Cement demand was flat in 1H22, up only 0.1% y/y to 1.3mn tons.

Local production met around 93.2% of local demand in 2021 (94.7% in 1H22). Cement import is very low and Turkey is a key importer excluding 2017-18, when around half of import was from Azerbaijan. Turkish cement regained share in import since 2019 as it became cheap due to weak Lira and support from the Turkish government for exporting companies.

Cement price had been relatively stable over 2020-21, but started to increase since Jan-22. Price growth could be attributed to increased production costs of cement producers worldwide and in Georgia. In particular, price growth on input materials (coal and clinker) and increased electricity costs coupled with overall inflation in the economy were reasons for cement price spike. In particular, cement retail price per ton increased by 27.6% y/y and reached US\$ 120 in Sep-22. The largest producers of the cement are Heidelberg Cement Georgia, Georgia Cement Company (GCC), Georgian Building Group (GBG), Mega Holding, and German Cement.

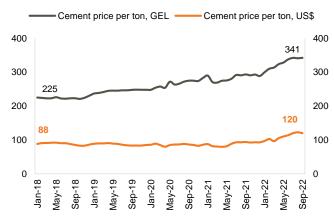


Figure 12: Production and import of cement in Georgia



Source: Geostat, Galt & Taggart Research

Figure 13: Cement retail price in Georgia



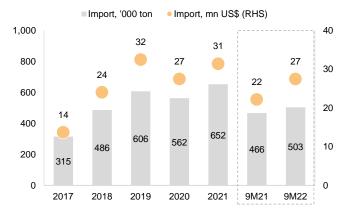
Source: Geostat, Galt & Taggart Research

Cement clinker is a key input material for producing cement.

Cement clinker imports stood at 652,000 tons (+16.0% y/y or +7.5% vs. 2019) and reached US\$ 31.4mn (+14.3% y/y or -3.2% vs 2019) in 2021. Information on local production of clinker is not available.

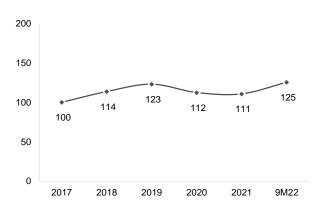
Clinker prices in US\$ terms were down over 2020-21 due to weak demand, but spiked in 9M22. In particular, clinker import price index was up 14.6% y/y in US\$ and 4.6% y/y in GEL in 9M22.

Figure 14: Import of clinker in Georgia



Source: Geostat

Figure 15: Import price index of clinker in US\$ in Georgia, FY17=100



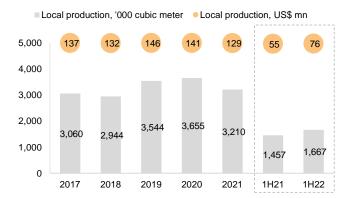
Source: Geostat, Galt & Taggart Research

# Overview of concrete and asphalt concrete market

Concrete and asphalt concrete production is volatile over years, because it depends heavily on infrastructure projects. Government's decision to continue infrastructure projects during the lockdown allowed concrete and asphalt concrete producers to continue operations in 2020. Still, concrete production was down to 3.2mn m³ (-12.2% y/y or +3.1% vs 2019) and asphalt concrete production to 1.1mn tons (-1.5% y/y or -9.1% vs 2019) in 2021. Concrete and asphalt concrete GEL prices increased by 8.4% and 4.8% y/y in 2021, respectively, which was due to both GEL depreciation and recovering demand after the pandemic. Concrete and asphalt concrete prices also increased slightly in 1H22 due to cement price growth (which is key input material). In particular, concrete price index was up 6.9% and asphalt concrete up 0.8% compared to 2021 level.

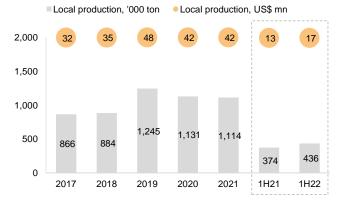
The major producers of the concrete are Heidelberg Cement, Mixor, Leader Concrete, Orbi Concrete and Georgian Concrete Company. Major producers of the asphalt concrete market are GRG, L & L, Elisi-2015, New Road Group and Akhali Karkhana.

Figure 16: Production of concrete in Georgia



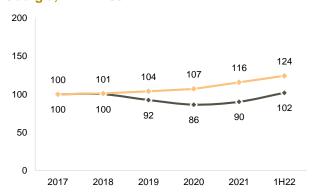
Source: Geostat

Figure 18: Production of asphalt concrete in Georgia



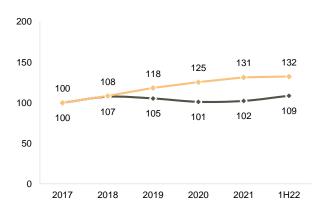
Source: Geostat

Figure 17: Price index of concrete in US\$ in Georgia, FY17=100



Source: Geostat, Galt & Taggart Research

Figure 19: Price index of asphalt concrete in US\$ in Georgia, FY17=100

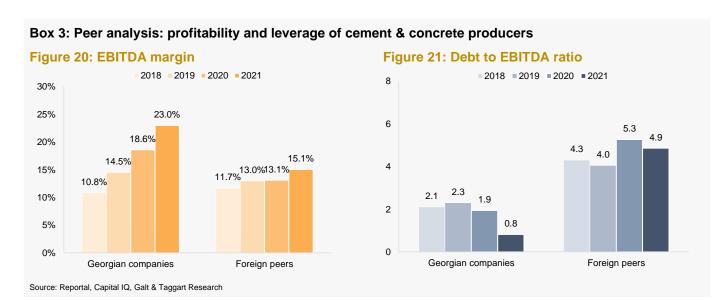


Source: Geostat, Galt & Taggart Research



Profitability of Georgian cement & concrete producers is higher compared to foreign peers, likely explained by lower costs on energy and labor. EBITDA margin of cement & concrete producers was on the rise over 2018-21, even in pandemic year 2020. Profitability growth in 2020 could be explained by only short-term interruption in construction and infrastructure projects, which helped to minimize cement & concrete demand drop.

Leverage of Georgian cement & concrete producers lags behind European and Asian peers. Debt to EBITDA ratio was down to 0.8 in 2021 (3.3 in peer companies) due to increased EBITDA and reduced debt of local companies.





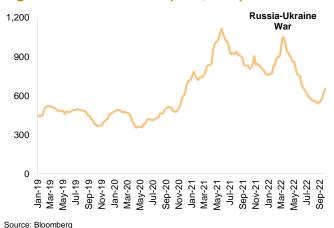
# Overview of re-bar market

Global prices of steel and rebar were affected by supply chain collapse, elevated demand and increased prices of input commodities. Iron ore is the major input used in global steel production, accounting for more than half (55%), followed by metallurgical coal with 28%, while steel scrap accounts for c. 16% of steel production. Iron ore and scrap prices started to grow in 2020 and the uptrend continued in 2021 with prices reaching record high levels (see Table 2). However, prices almost returned back to pre-pandemic level in recent months. Russia-Ukraine War disrupted trade flows (incl. ban on Russian steel) and led to temporarily higher steel prices during the onset of the war. However, iron ore and scrap prices continued stabilization since 2Q22. As a result, re-bar prices are on a downward trajectory.

Figure 22: Prices of Iron ore and scrap



Figure 23: Black sea HRC price, US\$ per metric ton



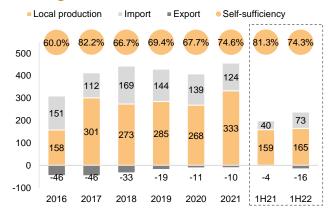
Note: price as of September 30, 2022

Domestic production of re-bars accounted for c. 75% of total demand in Georgia in 2021. Rebar production increased significantly to 332,964 tons (+24.1% y/y) and even stronger in value terms to US\$ 226.8mn (+72.2% y/y), due to price growth of re-bars in 2021 after slight drop in 2020. Re-bar production continued growth in 1H22 (+3.7% y/y to 165,168 tons).

Import of re-bars increased significantly by 80.3% y/y to 72,632 tons in 9M22. Re-bar imports account for about one fourth of total steel products import in Georgia. Georgia imported re-bars from Azerbaijan (40.1% of total), Russia (24.7%), Iran (20.8%) and Turkey (12.5%) in 9M22. Notably, import growth in 9M22 can be mainly attributed to significant growth of import from Russia, substituting Ukrainian re-bars in 9M22 (see Annex 2 for detailed analysis).

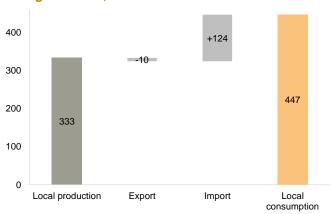


Figure 24: Production and external trade of rebars in Georgia, '000 tons



Source: Geostat, Galt & Taggart Research

Figure 25: Re-bar production and external trade in Georgia in 2021, '000 tons



Source: Geostat, Galt & Taggart Research

After decreasing in 2020, profitability of local re-bar producers spiked to 20.5% in 2021 on the back of demand recovery, increased re-bar prices globally, as well as companies managing to limit COGS and operating cost growth. Re-bars in Georgia are mainly produced by melting scrap in electric arc furnaces (which is highly dependent on electricity usage, but kept electricity costs stable compared to foreign peers), as opposed to smelting iron ore in blast furnaces. Furthermore, as Georgia is a net exporter of scrap, companies managed to maintain relatively stable COGS and operating costs.

Debt to EBITDA ratio of Georgian companies decreased significantly to 1.9 in 2021 from 5.1 in 2020, which is the result of increased EBITDA for the period. Foreign companies are more levered than Georgian peers.

Box 4: Peer analysis: profitability and leverage of steel producers

Figure 26: EBITDA margin 2018 2019 2020 2021 25% 20.5% 19.4% 20% 14.9% 15% 11.9% 10.7% 9.7% 10.5% 9.6% 10% 5% 0% Georgia companies Foreign peers

Source: Reportal, Capital IQ, Galt & Taggart Research Note: only financial results of re-bar producers used in case of Georgian companies

Figure 27: Debt to EBITDA ratio ■2018 ■2019 ■2020 ■2021 10 8 6.4 5.6 6 5.1 4.2 3.4 4 3.0 1.9 2 0 Georgia companies Foreign peers



# Overview of other products

Apart from cement, concrete, asphalt concrete and re-bar, there are some other products worth mentioning. Namely, gravel, blocks and steel products other than re-bar.

Table 7: Local production of other construction materials in Georgia, 2021

	Steel products	Gravel	Blocks
Share of local production in total demand	c. 35%	c. 100%	c. 67%

Source: Geostat, Galt & Taggart Research

**Steel products other than re-bar** – steel products (other than re-bar) account for the majority (52.7%) of construction material imports (<u>see Annex 3 for details</u>). Import of steel products such as billets, flat-rolled steel products, tin-coated steel stood at US\$ 205.5mn (+58.7% y/y) in 2021. Key local producers of steel products are Nova and GRC.

**Gravel** - gravel production was up to 11.8mn tons in 2021 (+9.8% y/y) after 13.1% y/y decline in 2020 due to temporarily stalled infrastructural activities due to lockdowns. Value of production in US\$ terms was up to US\$ 53.7 (+10.0% y/y) in 2021. Price of gravel remained almost same in 2021.

**Blocks** - production of blocks was down to 1.0mn cubic meters (-10.6% y/y) in 2021, while production value was up 0.9% y/y. Blocks imports were also down to 0.1mn tons (-4.9% y/y) in 2021, while import value was up to US\$ 13.0mn (+6.5% y/y). Decline in volume and growth in value could be explained by price growth. In particular, average prices have been declining over the years, but reversed and increased 12.8% y/y in 2021.

# Home improvement sector

# Home improvement sector

**Home improvement sector** combines renovation materials (i.e. lightside), household appliances and furniture & lighting subsectors. Unlike construction materials, share of local production in home improvement sector is low. Namely, share of locally produced renovation materials stood at only 17.9% of total demand in 2021, at 4.8% for household appliances and 27.0% for furniture and lighting.

Table 8: Local production of home improvement products in Georgia, 2021

Renovation materials Household appliances Furniture & lighting

Share of local production in total demand 17.9% 4.8% 27.0%

Source: Geostat, Galt & Taggart Research

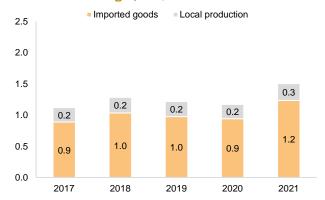
Home improvement sector suffered in 2020 due to weak demand and closure of stores during pandemic-related lockdowns. However, demand recovered quickly in 2021 and companies managed to maintain (even increased) operational effectiveness despite growth in prices. Local demand outlook remains healthy as recovery of construction permit issuance and real estate sales, as well as aftermarket renovation trends create favourable circumstances for the sector.

# Overview of renovation materials market

Renovation materials sector includes lightside products that could also be used during the construction process, but are generally available in home improvement stores. Thus, renovation materials sector combines production and trade of various products, such as ceramic tiles, wallpapers, tubes & pipes, doors and windows, gypsum, paints, bathroom and sanitary, etc.

Total revenue of renovation materials subsector soared to US\$ 1.5bn, up 28.5% y/y after 3.9% y/y reduction in 2020. Decline in 2020 was driven by lockdowns and restrictions on certain shops, while revenue growth in 2021 was boosted by demand recovery and price growth.

Figure 28: Production and trade of renovation materials in Georgia, US\$ bn



Source: Geostat, Galt & Taggart Research Note: exported goods included in local production

Figure 29: Share of local production of renovation materials in Georgia



Source: Geostat, Galt & Taggart Research



Local production of renovation (i.e. lightside) materials recovered also in 2021. Total value of locally produced materials was up 18.0% y/y to US\$ 269.1mn, after declining by 5.6% y/y to US\$ 228.2mn in 2020. Overall, local production of renovation materials accounted for only 17.9% of total demand.

Largest production is observed in plastic goods, such as tubes & pipes, doors & windows. Production of goods from woods also increased in 2021. Lowest dependency on imports is observed in wires & cables category – local production accounted for 53.6% of total demand.

Table 9: Production breakdown of renovation materials by input materials in Georgia, US\$ mn

	2017	2018	2019	2020	2021	CAGR 2017-2021	Local production share in 2021
Total	233	249	242	228	269	3.7%	17.9%
Plastic products	70	71	65	70	71	0.4%	24.7%
Wood products	46	49	46	38	54	4.2%	26.2%
Metal products	34	46	36	39	46	7.8%	15.3%
Wires & cables	24	25	30	25	37	11.9%	53.6%
Stone & ceramic products	22	26	30	22	28	6.2%	19.2%
Other renovation materials	38	34	35	33	33	-3.1%	6.2%

Source: Geostat, Galt & Taggart Research

Total value of imports increased by 3.2% CAGR over 2017-21 and reached US\$ 963.0mn (+21.9% y/y) in 2021. Notably, value of imported products continued strong growth and reached US\$ 873.3mn in 9M22 (+28.3% y/y), reflecting higher prices. Key import partners in renovation materials are Turkey (44.1% of total in 9M22) and China (12.4%).

Metal products accounted for 18.8% of total import value in 2021, followed by plastic products (16.8%), wood products (14.7%), stones & ceramics (10.1%), non-ferrous metals (8.3%), wires & cables (4.6%) and other products (26.7%).

In terms of products, tubes and pipes accounted for 12.0% of total import value, followed by doors & windows (10.9%), bathroom & sanitary (6.9%), working tools (6.0%), ceramic flags (5.9%), wires & cables (4.6%), wood products such as laminate flooring, MDF, fibreboard (4.6%) and other goods (45.1%).

Export is low, reaching US\$ 95mn in 2021 (+50.9% y/y and 5.5% vs 2019), part of which is re-export. Main exporting destinations are regional countries, with Armenia and Azerbaijan accounting for 51.4% of total exports.



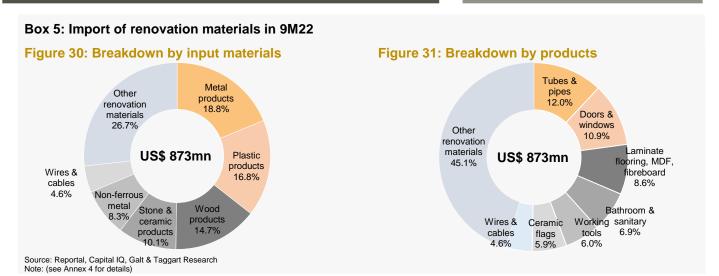


Table 10: Import breakdown of renovation materials by input materials and products in Georgia, US\$ mn

	2017	2018	2019	2020	2021	9M21	9M22	% growth, 9M21-22	CAGR 2017-2021
Total	849	933	937	790	963	681	873	28.3%	3.2%
Metal products	185	200	197	160	187	135	164	21.6%	0.4%
Plastic products	148	157	159	144	180	128	146	14.0%	5.1%
Wood products	105	121	124	100	129	90	128	42.3%	5.3%
Stone & ceramic products	82	91	90	78	90	65	89	36.5%	2.4%
Non-ferrous metal products	47	55	58	53	78	51	73	41.4%	13.6%
Wires & cables	56	64	62	37	44	31	40	30.1%	-5.9%
Other	227	246	247	218	255	180	233	29.6%	2.9%
Total	849	933	937	790	963	681	873	28.3%	3.2%
Tubes & pipes	134	139	134	105	135	99	105	5.4%	0.3%
Doors & windows	94	102	105	92	115	81	95	17.7%	5.1%
Laminate floor, MDF, fiberboard	59	65	65	57	80	55	75	35.6%	7.8%
Bathroom & sanitary	57	66	66	53	57	39	60	56.5%	0.0%
Working tools	47	52	51	52	62	46	53	15.1%	7.0%
Ceramic flags	47	51	49	43	53	38	52	34.4%	3.0%
Wires & cables	56	64	62	37	44	31	40	30.1%	-5.9%
Other	356	394	406	350	418	292	394	35.0%	4.1%

Source: Geostat, Galt & Taggart Research Note: (see Annex 4 for details)





Profitability margins of renovation material stores vary depending on the business model of the companies. Specialized retailers of renovation materials such as hardware, paint, glass or wallpaper stores have higher profitability compared to DIY (do-it-yourself) stores, because later ones target larger turnover and smaller margins. Key DIY retailers in Georgia are Gorgia, Domino, Modus, Bricorama and Mihouse, while key specialized retailers and wholesalers are Jaoken, Demas, Zodi, Kapelis Sakhli, Citadeli, and Nova. Notably, more and more companies are expanding their operations and opening DIY stores (e.g. Nova).

Sector profitability margins were on the uptrend over 2018-21 despite pandemic related disruptions. Profitability growth in 2020 could be explained by the fact that companies managed to minimize operating costs over lockdowns - state assistance for employees limited remuneration costs, utility bills minimized due to store closures and companies saving on rents (majority own real estate and some had rent holidays). Profitability growth continued in 2021 also with EBITDA margin reaching 12.6% in DIY stores and 18.3% in specialized stores. EBITDA margins of Georgian DIY retailers was below the margins of local specialized retailers and wholesalers - specialized stores have higher margins but lower turnover compared to DIY stores. Furthermore, EBITDA margins of Georgian DIY retailers were higher compared to peers, due to lower labor and rental cots.

As for the leverage metrics, debt to EBITDA ratios decreased in 2021, which mainly come from increased EBITDA. In addition, on average Georgian companies are slightly less leveraged than foreign peers. Additionally, debt to EBITDA ratio of DIY companies is inflated by large shareholder loan of one of the company in the sample.

Box 6: Peer analysis: profitability and leverage of renovation materials retailers/wholesalers Figure 32: EBITDA margin Figure 33: Debt to EBITDA ratio 25% 8 2018 2019 2020 2021 2018 2019 2020 2021 20% 18.3% 6 15.7% 14.1%13.3% 4.3 4.2 15% 12.9% 4.0 11.9% 4 3.2 9.6% 8.7% 7.5% 2.7 2.6 10% 6.8% 6.8% 7.1% 1.9 1.9 1.7 1.9 2 1.3 5% 0 0% Georgian companies Georgian companies Foreign peers (DIY) Georgian companies Georgian companies Foreign peers (DIY) (DIY) (specialized) (DIY) (specialized) Source: Reportal, Capital IQ, Galt & Taggart Research Note 1: companies in specialized trade include some retailers that are also trading with Note 2: outliers excluded from the sample of DIY companies



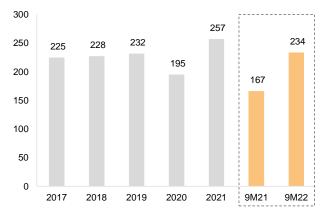
# Overview of household appliances market

The market for household appliances (heating & cooling systems, electronic products etc.) is fully dependent on import. Total import of household appliances increased by 31.8% y/y to US\$ 257.4mn in 2021 and surpassed pre-pandemic level after decreasing substantially in 2020 (-15.8% y/y).

Demand for household appliances particularly increased after pandemic lockdowns and stay-at-home measures as consumers' changing lifestyles increased sales of household appliances. Import growth accelerated in 9M22, increasing by 40.4% y/y to US\$ 233.8mn. This growth reflects both, price and demand growth. Notably, trade of household appliances usually intensifies from October through December due to seasonality and c. 35% of total trade takes place in 4Q. Therefore, we expect import of household appliances to surpass US\$ 350mn in FY22.

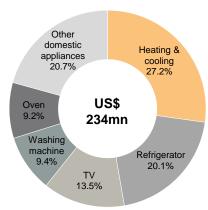
Heating & cooling appliances (central heating boilers, radiators, air conditioners, HVAC systems) accounted for 27.2% of total import value in 9M22. Apart from households, owners of commercial buildings (such as business centers, hotels), also support demand. Other products with largest import value are refrigerators (20.1% of import value in 9M22), TV sets (13.5%), washing machines (9.4%), ovens (9.2%) and other domestic appliances (20.7%). Growth rate was in double digits in every product category due to price surge of electronic products worldwide.

Figure 34: Import of household appliances in Georgia, US\$ mn



Source: Geostat, Galt & Taggart Research
Note: import value excludes smartphones, laptops and other products that are not classified
as household appliances

Figure 35: Import breakdown of household appliances by products in Georgia, 9M22



Source: Geostat, Galt & Taggart Research Note: (see Annex 4 for details)



Table 11: Import breakdown of household appliance by products in Georgia, US\$ mn

	2017	2018	2019	2020	2021	9M21	9M22	% growth, 9M21-9M22	CAGR 2017- 2021
Total	225	228	232	195	257	167	234	40.4%	3.4%
Heating & cooling	54	69	73	53	62	41	64	55.3%	3.7%
Refrigerator	39	39	42	36	51	34	47	36.0%	6.8%
TV	43	37	33	27	35	21	32	52.0%	-5.1%
Washing machine	21	21	21	19	24	16	22	40.8%	2.8%
Oven	20	21	20	20	26	18	21	22.2%	6.7%
Other domestic appliances	48	41	43	41	60	37	48	30.2%	5.6%

Source: Geostat, Galt & Taggart Research

Although significantly lower in value than import, total export increased by 54.1% y/y to US\$ 40.0mn in 2021, and surpassing also 2019 level by 73.7%. Considerable portion of this value comes from Atlantic Georgia's operations, producing 264,000 water heaters (US\$ 15.8mn) in 2021 and exporting 98% of the production to Russia, France, Ukraine, Poland and Spain. Most of the remaining export can be attributed to re-export.

Prices of household appliances were impacted by semiconductor deficit. The supply-related constraints of semiconductors (which are key input for electronic goods) have troubled global electronics producers since 2021. As a result, retail prices for selected household appliance products increased sharply. Price growth continued until 2Q22 and started stabilization from 3Q22 on the back of GEL appreciation, decrease in transportation costs and stabilization of electronic product prices globally.

Figure 36: Retail price index of selected household appliances in Georgia, Jan-20=100

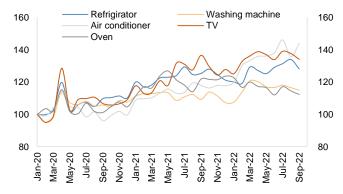


Table 12: Retail price change, Sep-22

•	• •	
	y/y change	Change compared to Jan-20
Refrigerator	2.2%	28.1%
Washing machine	5.2%	15.0%
Oven	-7.8%	12.3%
Air conditioner	22.2%	44.0%
TV	-1.8%	34.0%

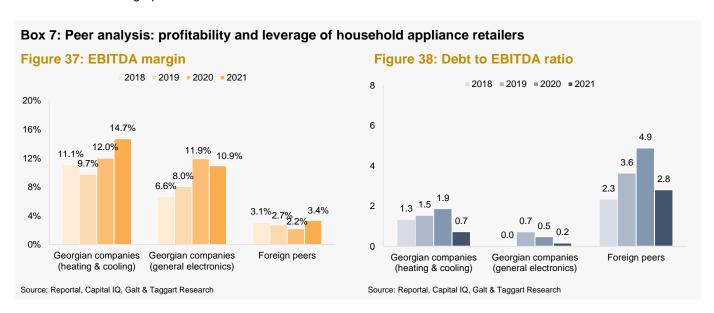
Source: Geostat, Galt & Taggart Research

Key players of household appliances market are Elite Electronics, Metromart, and Megatechnika in general appliance stores, while Maxterm, Saga, Termoindustria, and Thermocenter are market leaders in heating & cooling appliances.



Household appliances retailers in Georgia have significantly higher profitability margins than their foreign peers. This difference might be explained by relatively strong competition in foreign markets that results in margin squeezes. Profitability growth in 2020 could be explained by the fact that companies managed to minimize operating costs over lockdowns (e.g. state assistance for employees lowered remuneration costs). Some of the companies also shifted partially to e-commerce (see Annex 6 for details).

Leverage of Georgian household appliance retailers is significantly lower compared to peers, with debt to EBITDA ratios standing at 0.7 for heating & cooling and 0.2 for general electronics companies, while ratio stood at 2.8 for foreign peers.



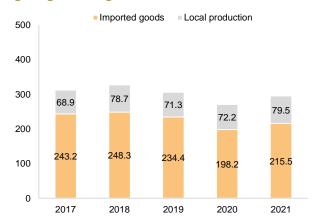


# Overview of furniture & lighting market

Furniture & lighting market suffered heavily over pandemic and has not fully recovered in 2021. Overall, market size of furniture & lighting shrank since 2018 in US\$ terms. Decrease of the furniture & lighting market could be associated with the slowdown of new hotel openings as hospitality sector is one of the largest buyers of furniture & Lighting apart from households.

Local production had been growing slowly over 2017-2021 and still remains at only 27.0% of total sector revenue. Notably, there are many small individual producers on the market who could be part of the shadow economy and actual figures of local production could be higher.

Figure 39: Production and trade of furniture & lighting in Georgia, US\$ mn



Source: Geostat, Galt & Taggart Research Note: exported goods included in production

Figure 40: Local production share of furniture & lighting sector in Georgia



Source: Geostat, Galt & Taggart Research

Furniture & lighting imports were up 17.2% y/y in 2021, while it reduced 30.0% y/y in 2020. Such sharp decline in import value could be explained by sharply decreased demand from the hospitality sector. Resumption of tourism and hospitality projects could be behind 41.8% y/y growth of furniture & lighting imports in 9M22. Main importing countries of furniture are Turkey (30.2% of total), China (23.5%), and Italy (8.3%) (see Annex 4 for details).

Furniture & lighting market was no exception to price growth. The retail prices for selected furniture products increased sharply since the beginning of pandemic. Unlike other home improvement products, furniture prices still rushing, which can be explained by the ongoing growth of wood product prices (see figure 5)

Figure 41: Retail price index of selected furniture products in Georgia, Jan-20=100

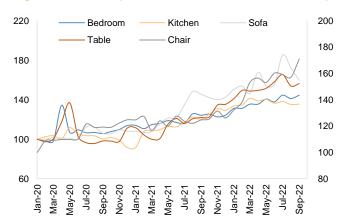


Table 13: Retail price change, Sep-22									
	y/y change	Change compared to Jan-20							
Bedroom	16.3%	44.6%							
Kitchen	12.7%	35.6%							
Sofa	28.2%	56.4%							
Table	37.2%	71.1%							
Chair	9.8%	59.8%							

Source: Geostat, Galt & Taggart Research

Furniture market is quite fragmented with many small individual entities providing goods and services. Key players on the furniture market are Laboratory My Home, Verona, Jysk Georgia, LTB, and Belux, while New Light is a leader on a lighting market. Notably, some of the players started to mix furniture and lighting in the same stores (e.g. Forum by New Light).

Furniture & lighting stores in Georgia have around twice as high EBITDA margin as their foreign peers. Profitability was up in 2020 also despite lockdowns - state assistance for employees reducing labor costs, utility bills minimized due to store closures and companies saving on rents (majority own real estate and some had rent holidays).

Debt to EBITDA ratio of Georgian companies is relatively lower, which indicates that these firms are underleveraged compared to peers.

Box 8: Peer analysis: profitability and leverage of furniture & lighting retailers Figure 42: EBITDA margin Figure 43: Debt to EBITDA ratio 25% 8 2018 2019 2020 2021 ■ 2018 ■ 2019 ■ 2020 ■ 2021 17.5% 16.2% 20% 6 13.4% 15% 3.6 4 9.3% 9.4% 2.8 2.8 10% 7.9% 5.7% 6.4% 1.5 1.5 2 5% 0% 0 Georgia companies Foreign peers Georgia companies Foreign peers Source: Reportal, Capital IQ, Galt & Taggart Research



# **Annex 1: External trade partners**

Table 14: Import of construction materials and home improvement products by country, US\$ mn

	2017	2018	2019	2020	2021	9M21	9M22	% growth 9M21-22	CAGR 2017-2021	Share in total, 9M22
Total	1,467.7	1,628.1	1,614.0	1,373.7	1,750.5	1,218.2	1,613.7	32.5%	4.5%	
Turkey	522.5	566.1	601.9	545.4	675.2	462.6	591.6	27.9%	6.6%	36.7%
China	240.1	256.4	273.1	228.4	270.1	183.1	263.1	43.7%	3.0%	16.3%
Russia	106.0	133.9	122.1	113.2	149.7	110.4	137.3	24.4%	9.0%	8.5%
Azerbaijan	49.6	56.9	56.7	48.4	82.9	60.3	93.0	54.3%	13.7%	5.8%
Iran	31.4	76.3	81.0	18.3	81.8	56.4	87.4	54.8%	27.1%	5.4%
Italy	59.1	68.4	67.2	56.4	69.6	49.8	60.2	21.0%	4.2%	3.7%
Germany	57.8	62.9	55.8	46.6	45.9	32.7	44.6	36.5%	-5.6%	2.8%
Ukraine	105.4	118.4	88.9	90.4	99.2	68.4	35.6	-48.0%	-1.5%	2.2%
Spain	22.0	22.0	26.3	20.5	22.2	15.8	28.0	77.1%	0.3%	1.7%
Poland	26.6	29.1	30.6	24.6	29.0	20.7	26.7	29.0%	2.2%	1.7%
Other	247.2	237.6	210.3	181.6	224.9	158.0	246.2	55.8%	-2.3%	15.3%

Source: Geostat, Galt & Taggart Research

Table 15: Export of construction materials and home improvement products by country, US\$ mn

2017	2018	2019	2020	2021	9M21	9M22	% growth 9M21-22	CAGR 2017-2021	Share in total, 9M22
151.5	171.5	177.8	119.7	183.3	126.1	167.5	32.8%	4.9%	
22.2	31.5	32.9	41.9	54.4	36.7	65.3	77.8%	25.0%	4.0%
43.6	28.9	31.9	13.2	32.1	24.0	20.5	-14.6%	-7.4%	1.3%
28.2	36.2	29.5	14.6	21.8	13.8	20.0	45.3%	-6.2%	1.2%
17.7	14.2	15.0	9.5	12.6	8.8	10.7	22.4%	-8.2%	0.7%
6.2	5.3	9.1	9.0	8.7	6.5	10.5	61.5%	9.0%	0.6%
0.0	0.2	3.2	3.9	8.0	6.1	5.8	-4.9%	406.4%	0.4%
0.0	0.1	1.4	1.8	4.7	3.0	4.3	42.1%	272.6%	0.3%
2.5	4.6	1.7	1.0	5.2	1.8	3.4	96.3%	19.5%	0.2%
4.3	5.4	4.1	2.8	4.1	2.7	3.3	22.6%	-1.0%	0.2%
3.8	1.7	2.1	2.0	0.7	0.6	2.7	310.2%	-34.8%	0.2%
22.9	43.5	46.9	19.9	31.0	22.1	20.9	-5.1%	7.8%	0.0%
	151.5 22.2 43.6 28.2 17.7 6.2 0.0 0.0 2.5 4.3 3.8	151.5     171.5       22.2     31.5       43.6     28.9       28.2     36.2       17.7     14.2       6.2     5.3       0.0     0.2       0.0     0.1       2.5     4.6       4.3     5.4       3.8     1.7	151.5     171.5     177.8       22.2     31.5     32.9       43.6     28.9     31.9       28.2     36.2     29.5       17.7     14.2     15.0       6.2     5.3     9.1       0.0     0.2     3.2       0.0     0.1     1.4       2.5     4.6     1.7       4.3     5.4     4.1       3.8     1.7     2.1	151.5         171.5         177.8         119.7           22.2         31.5         32.9         41.9           43.6         28.9         31.9         13.2           28.2         36.2         29.5         14.6           17.7         14.2         15.0         9.5           6.2         5.3         9.1         9.0           0.0         0.2         3.2         3.9           0.0         0.1         1.4         1.8           2.5         4.6         1.7         1.0           4.3         5.4         4.1         2.8           3.8         1.7         2.1         2.0	151.5         171.5         177.8         119.7         183.3           22.2         31.5         32.9         41.9         54.4           43.6         28.9         31.9         13.2         32.1           28.2         36.2         29.5         14.6         21.8           17.7         14.2         15.0         9.5         12.6           6.2         5.3         9.1         9.0         8.7           0.0         0.2         3.2         3.9         8.0           0.0         0.1         1.4         1.8         4.7           2.5         4.6         1.7         1.0         5.2           4.3         5.4         4.1         2.8         4.1           3.8         1.7         2.1         2.0         0.7	151.5         171.5         177.8         119.7         183.3         126.1           22.2         31.5         32.9         41.9         54.4         36.7           43.6         28.9         31.9         13.2         32.1         24.0           28.2         36.2         29.5         14.6         21.8         13.8           17.7         14.2         15.0         9.5         12.6         8.8           6.2         5.3         9.1         9.0         8.7         6.5           0.0         0.2         3.2         3.9         8.0         6.1           0.0         0.1         1.4         1.8         4.7         3.0           2.5         4.6         1.7         1.0         5.2         1.8           4.3         5.4         4.1         2.8         4.1         2.7           3.8         1.7         2.1         2.0         0.7         0.6	151.5         171.5         177.8         119.7         183.3         126.1         167.5           22.2         31.5         32.9         41.9         54.4         36.7         65.3           43.6         28.9         31.9         13.2         32.1         24.0         20.5           28.2         36.2         29.5         14.6         21.8         13.8         20.0           17.7         14.2         15.0         9.5         12.6         8.8         10.7           6.2         5.3         9.1         9.0         8.7         6.5         10.5           0.0         0.2         3.2         3.9         8.0         6.1         5.8           0.0         0.1         1.4         1.8         4.7         3.0         4.3           2.5         4.6         1.7         1.0         5.2         1.8         3.4           4.3         5.4         4.1         2.8         4.1         2.7         3.3           3.8         1.7         2.1         2.0         0.7         0.6         2.7	2017         2018         2019         2020         2021         9M21         9M22         9M21-22           151.5         171.5         177.8         119.7         183.3         126.1         167.5         32.8%           22.2         31.5         32.9         41.9         54.4         36.7         65.3         77.8%           43.6         28.9         31.9         13.2         32.1         24.0         20.5         -14.6%           28.2         36.2         29.5         14.6         21.8         13.8         20.0         45.3%           17.7         14.2         15.0         9.5         12.6         8.8         10.7         22.4%           6.2         5.3         9.1         9.0         8.7         6.5         10.5         61.5%           0.0         0.2         3.2         3.9         8.0         6.1         5.8         -4.9%           0.0         0.1         1.4         1.8         4.7         3.0         4.3         42.1%           2.5         4.6         1.7         1.0         5.2         1.8         3.4         96.3%           4.3         5.4         4.1         2.8 <t< td=""><td>2017         2018         2019         2020         2021         9M21         9M22         9M21-22         2017-2021           151.5         171.5         177.8         119.7         183.3         126.1         167.5         32.8%         4.9%           22.2         31.5         32.9         41.9         54.4         36.7         65.3         77.8%         25.0%           43.6         28.9         31.9         13.2         32.1         24.0         20.5         -14.6%         -7.4%           28.2         36.2         29.5         14.6         21.8         13.8         20.0         45.3%         -6.2%           17.7         14.2         15.0         9.5         12.6         8.8         10.7         22.4%         -8.2%           6.2         5.3         9.1         9.0         8.7         6.5         10.5         61.5%         9.0%           0.0         0.2         3.2         3.9         8.0         6.1         5.8         -4.9%         406.4%           0.0         0.1         1.4         1.8         4.7         3.0         4.3         42.1%         272.6%           2.5         4.6         1.7         &lt;</td></t<>	2017         2018         2019         2020         2021         9M21         9M22         9M21-22         2017-2021           151.5         171.5         177.8         119.7         183.3         126.1         167.5         32.8%         4.9%           22.2         31.5         32.9         41.9         54.4         36.7         65.3         77.8%         25.0%           43.6         28.9         31.9         13.2         32.1         24.0         20.5         -14.6%         -7.4%           28.2         36.2         29.5         14.6         21.8         13.8         20.0         45.3%         -6.2%           17.7         14.2         15.0         9.5         12.6         8.8         10.7         22.4%         -8.2%           6.2         5.3         9.1         9.0         8.7         6.5         10.5         61.5%         9.0%           0.0         0.2         3.2         3.9         8.0         6.1         5.8         -4.9%         406.4%           0.0         0.1         1.4         1.8         4.7         3.0         4.3         42.1%         272.6%           2.5         4.6         1.7         <

Source: Geostat, Galt & Taggart Research

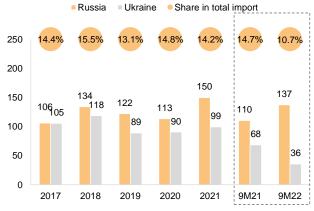


# Annex 2: External trade with Ukraine and Russia

Total import of construction materials and home improvement products from Russia and Ukraine amounted to US\$ 248.9mn in 2021 (+22.3% y/y) or 14.2% of total. Russia accounted for 8.6% of total imports and Ukraine for 5.7%. Combined share of Russia and Ukraine in the import of construction materials and home improvement products was down to 10.7% in 9M22 (14.7% in 9M21) due to ongoing war. Notably, import was down from Ukraine (-48.0% y/y) and up from Russia (+24.4% y/y).

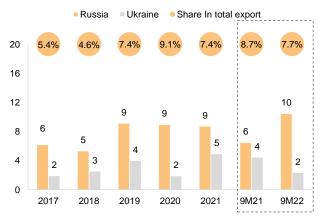
Notably, there is no specific dependence on imports from Ukraine in any of product category. Ukraine held largest share in the import of construction materials (mostly steel products), however it was substituted by imports from Azerbaijan and Russia. Export dynamics is similar - value of exported goods to Russia increased y/y but decreased to Ukraine in 9M22. Russia and Ukraine accounted for only around 7.7% of the total export in 9M22 (8.7% in 9M21).

Figure 44: Import from Ukraine and Russia, US\$ mn



Source: Geostat, Galt & Taggart Research

Figure 45: Export to Ukraine and Russia, US\$ mn



Source: Geostat, Galt & Taggart Research

Table 16: Share of Russia and Ukraine in the imports by subsectors

	2017	2018	2019	2020	2021	9M21	9M22
Russia	7.2%	8.2%	7.6%	8.2%	8.6%	9.1%	8.5%
Renovation materials	6.2%	7.6%	7.7%	8.0%	8.5%	8.7%	8.2%
Construction materials	7.8%	10.3%	8.9%	10.7%	9.5%	11.1%	14.0%
Household appliances	14.1%	11.6%	9.3%	9.0%	10.0%	10.4%	4.2%
Furniture & lighting	1.9%	2.7%	2.4%	2.8%	3.3%	3.4%	2.8%
Ukraine	7.2%	7.3%	5.5%	6.6%	5.7%	5.6%	2.2%
Renovation materials	4.1%	3.4%	3.0%	3.2%	3.3%	3.4%	1.6%
Construction materials	23.5%	23.1%	18.0%	19.7%	13.2%	12.6%	3.1%
Household appliances	3.2%	3.0%	1.9%	3.1%	3.2%	3.0%	2.6%
Furniture & lighting	4.7%	4.7%	3.7%	4.8%	5.3%	5.7%	3.0%

Source: Geostat, Galt & Taggart Research



# **Annex 3: Construction materials: import of top products**

# Table 17: Import of cement in Georgia, '000 US\$

	2017	2018	2019	2020	2021	9M21	9M22
Total	16.4	9.6	5.3	10.0	12.3	9.2	9.0
Turkey	65.5%	50.6%	97.1%	99.5%	99.7%	99.6%	97.6%
Azerbaijan	33.9%	43.4%	2.0%	0.0%	0.3%	0.3%	2.0%
Iran	0.2%	3.8%	0.4%	0.3%	0.0%	0.0%	0.4%
Greece	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
France	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	0.4%	2.2%	0.4%	0.1%	0.0%	0.0%	0.0%

Source: Geostat, Galt & Taggart Research

# Table 18: Import of cement clinker in Georgia, US\$ mn

	2017	2018	2019	2020	2021	9M21	9M22
Total	13.7	24.0	32.4	27.4	31.3	22.2	27.4
Azerbaijan	70.6%	58.8%	72.6%	67.2%	97.2%	96.0%	100.0%
Turkey	13.5%	28.8%	12.0%	27.7%	2.8%	4.0%	0.0%
Other	15.9%	12.4%	15.5%	5.0%	0.0%	0.0%	0.0%

Source: Geostat, Galt & Taggart Research

# Table 19: Import of re-bar in Georgia, US\$ mn

	2017	2018	2019	2020	2021	9M21	9M22
Total	53.8	96.4	67.0	61.7	86.8	58.0	96.3
Azerbaijan	15.8%	13.0%	26.6%	21.7%	36.6%	43.0%	40.1%
Russia	3.6%	9.6%	2.7%	15.6%	3.5%	5.1%	24.7%
Iran	0.3%	21.2%	17.1%	4.0%	16.0%	15.4%	20.8%
Turkey	5.3%	2.6%	2.3%	1.9%	21.2%	15.5%	12.5%
Ukraine	74.6%	53.5%	51.3%	56.7%	22.6%	20.9%	1.9%
Other	0.4%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%

Source: Geostat, Galt & Taggart Research

# Table 20: Import of steel (other than re-bar) in Georgia, US\$ mn

	2017	2018	2019	2020	2021	9M21	9M22
Total	117.1	139.6	126.9	129.5	205.6	150.0	187.6
Turkey	28.9%	24.7%	27.7%	38.5%	24.5%	23.1%	29.4%
China	37.0%	27.5%	25.5%	22.1%	21.6%	19.6%	18.6%
Russia	9.1%	12.9%	12.3%	10.0%	11.9%	14.2%	11.3%
Iran	0.9%	5.7%	10.3%	1.8%	9.9%	9.7%	10.4%
South Korea	5.3%	5.8%	6.5%	5.6%	5.2%	4.7%	7.1%
Other	18.8%	23.5%	17.7%	21.9%	26.8%	28.7%	23.2%

Source: Geostat, Galt & Taggart Research

# Table 21: Import of blocks in Georgia, US\$ mn

	2017	2018	2019	2020	2021	9M21	9M22
Total	10.4	16.4	12.2	12.2	13.0	9.0	10.7
Turkey	45.6%	47.4%	55.9%	56.9%	50.3%	52.0%	52.6%
Russia	2.9%	3.0%	7.7%	6.7%	13.1%	11.6%	9.5%
China	4.0%	11.8%	3.6%	4.3%	13.9%	10.4%	7.6%
India	2.0%	1.2%	3.0%	1.9%	2.3%	2.7%	5.6%
Austria	3.5%	4.0%	2.6%	3.5%	0.0%	0.0%	4.0%
Other	42.0%	32.6%	27.3%	26.7%	20.4%	23.2%	20.8%

Source: Geostat, Galt & Taggart Research Note: includes refractory bricks also



# Annex 4: Home improvement: import of top products

Table 22: Import of tubes and pipes in Georgia, US\$ mn

	2017	2018	2019	2020	2021	9M21	9M22
Total	133.6	139.0	133.7	104.9	135.0	99.2	104.6
Turkey	66.5%	60.4%	63.1%	67.7%	62.4%	64.0%	59.0%
Russia	2.5%	3.4%	4.4%	7.1%	9.1%	8.9%	10.0%
Iran	1.1%	4.7%	8.5%	1.2%	6.3%	5.9%	8.6%
China	5.4%	5.8%	7.0%	6.5%	6.0%	5.2%	6.4%
Italy	3.3%	3.2%	5.1%	4.4%	4.4%	4.4%	5.3%
Other	21.2%	22.6%	11.8%	13.2%	11.8%	11.5%	10.7%

# Table 23: Import of doors and windows in Georgia, US\$ mn

	2017	2018	2019	2020	2021	910121	9WZZ
Total	94.1	102.3	104.6	92.4	114.8	80.6	94.9
Turkey	45.6%	45.5%	46.8%	46.3%	45.8%	45.3%	45.0%
China	17.6%	17.7%	18.2%	17.4%	16.3%	15.8%	19.8%
Russia	3.7%	5.2%	5.5%	5.2%	6.1%	5.8%	6.3%
Germany	4.6%	5.6%	5.2%	5.2%	4.9%	5.2%	5.0%
Armenia	2.5%	2.7%	2.9%	3.8%	4.2%	4.0%	3.4%
Other	26.0%	23.3%	21.4%	22.2%	22.7%	23.9%	20.6%

Table 24: Import of bathroom and sanitary products in Georgia, US\$ mn

	2017	2018	2019	2020	2021	910121	910122
Total	56.6	65.8	66.4	53.1	56.6	38.7	60.5
Turkey	23.4%	22.4%	28.5%	26.0%	27.5%	29.1%	25.2%
China	24.7%	26.1%	26.2%	30.9%	26.1%	25.1%	22.8%
Italy	12.2%	11.9%	8.7%	10.6%	11.8%	10.9%	15.2%
Germany	8.2%	8.7%	8.9%	8.0%	7.4%	7.0%	12.2%
Russia	6.1%	7.4%	8.2%	5.8%	10.7%	10.8%	5.1%
Other	25.5%	23.5%	19.6%	18.8%	16.5%	17.0%	19.4%

Source: Geostat, Galt & Taggart Research

Source: Geostat, Galt & Taggart Research

Source: Geostat, Galt & Taggart Research

# Table 25: Import of working tools in Georgia, US\$ mn

	2017	2018	2019	2020	2021	9W21	9W22
Total	47.1	51.8	50.9	52.3	61.9	45.8	52.7
China	32.2%	30.8%	36.9%	42.5%	40.7%	36.2%	38.8%
Turkey	15.7%	18.8%	15.7%	19.4%	18.8%	20.0%	22.9%
Italy	5.8%	9.9%	8.8%	5.9%	10.2%	13.2%	7.6%
Germany	10.2%	11.3%	10.6%	9.5%	7.4%	6.9%	7.2%
Poland	2.9%	3.1%	3.5%	2.9%	3.5%	3.3%	3.4%
Other	33.2%	26.2%	24.5%	19.7%	19.5%	20.4%	20.1%
Source: Geostat, Galt & Taggart Research							

Table 26: Import of ceramic flags in Georgia, US\$ mn

	2017	2018	2019	2020	2021	9M21	9M22
Total	46.8	51.0	49.4	42.9	52.7	38.5	51.7
Iran	32.3%	38.4%	37.5%	10.8%	38.2%	38.4%	34.4%
Spain	23.6%	24.9%	24.8%	25.1%	24.9%	23.6%	33.3%
Turkey	14.8%	15.0%	17.7%	39.5%	22.9%	23.0%	19.2%
Italy	9.2%	8.0%	7.2%	7.2%	6.8%	6.8%	6.0%
India	1.9%	1.4%	1.2%	3.2%	2.2%	2.5%	2.2%
Other	18.2%	12.4%	11.6%	14.2%	5.0%	5.7%	4.9%
Source: Geostat, Galt & Taggart Research							

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Ta	ble	27:	Import	Ot	wires &	k cables	ın	Georg	gia,	US\$ mn
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	2017	2018	2019	2020	2021	9M21	9M22
Total	55.5	63.8	61.8	37.3	43.5	30.9	40.2
Turkey	48.8%	49.0%	64.8%	54.5%	59.5%	60.4%	59.8%
China	14.5%	15.7%	11.3%	14.3%	9.3%	8.5%	11.3%
Belarus	2.9%	2.7%	1.2%	1.2%	1.0%	1.2%	4.3%
Azerbaijan	2.7%	4.2%	2.6%	1.9%	3.4%	4.0%	4.1%
Ukraine	8.6%	5.2%	4.2%	6.1%	7.9%	8.0%	3.2%
Other	22.5%	23.2%	15.9%	22.1%	19.0%	17.9%	17.3%

Source: Geostat, Galt & Taggart Research

Table 28: Import of wood products (laminate flooring, MDF, fibreboard) in Georgia, US\$ mn

	2017	2018	2019	2020	2021	9M21	9M22
Total	59.5	65.4	64.6	57.3	80.3	55.1	74.8
Turkey	55.8%	56.9%	62.9%	65.1%	73.7%	73.4%	70.1%
Russia	9.1%	9.0%	8.6%	8.6%	7.1%	7.6%	10.4%
Belarus	3.7%	3.8%	2.9%	3.0%	2.8%	2.1%	5.9%
Germany	6.5%	5.6%	4.1%	4.1%	4.5%	4.3%	3.8%
Romania	1.4%	2.2%	2.9%	2.7%	2.9%	2.6%	2.3%
Other	23.5%	22.5%	18.6%	16.6%	9.0%	9.9%	7.6%

Source: Geostat, Galt & Taggart Research

Table 29: Import of household appliances in Georgia, US\$ mn

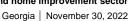
	2017	2018	2019	2020	2021	9M21	9M22
Total	225.2	227.7	231.9	195.3	257.3	166.6	233.9
China	20.4%	23.4%	28.1%	25.9%	24.3%	26.0%	29.1%
Turkey	26.4%	26.7%	27.5%	27.7%	29.2%	27.3%	26.5%
Italy	6.1%	6.6%	7.5%	6.5%	7.9%	7.8%	6.9%
Russia	14.1%	11.6%	9.3%	9.0%	10.0%	10.4%	4.2%
Singapore	2.0%	4.6%	3.8%	3.9%	1.8%	1.5%	4.1%
Other	31.0%	27.0%	23.9%	27.0%	26.9%	27.1%	29.1%

Source: Geostat, Galt & Taggart Research

Table 30: Import of furniture in Georgia, US\$ mn

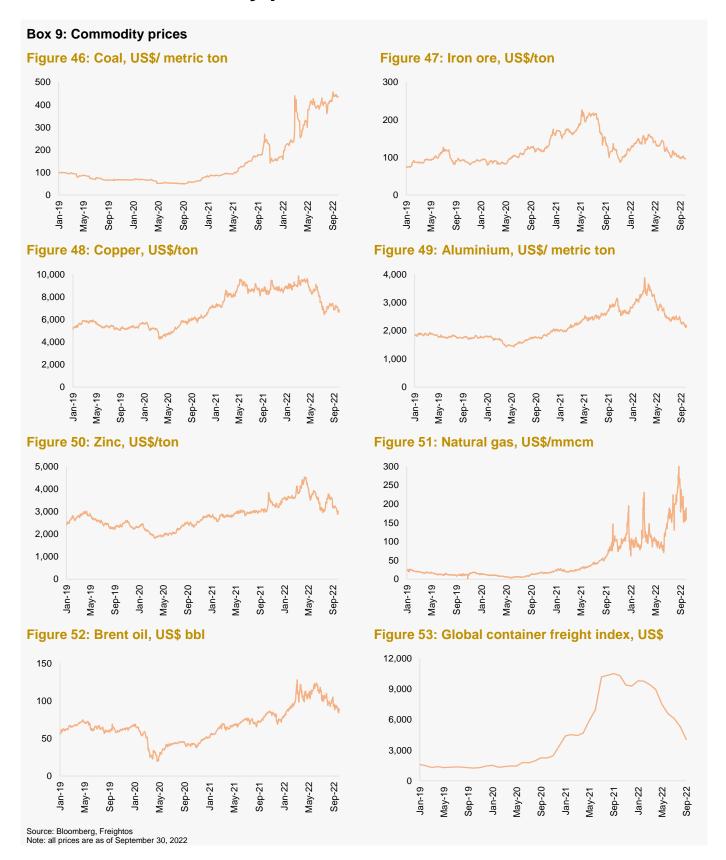
	2017	2018	2019	2020	2021	9M21	9M22
Total	155.0	155.2	170.4	119.4	139.9	94.0	133.3
Turkey	25.1%	29.4%	29.0%	28.7%	30.2%	28.4%	33.2%
China	20.5%	23.3%	23.6%	24.4%	23.5%	23.2%	25.7%
Italy	7.0%	9.6%	7.0%	9.0%	8.3%	8.6%	7.6%
Bulgaria	1.3%	1.6%	1.4%	2.1%	3.3%	3.4%	3.7%
Ukraine	4.7%	4.7%	3.7%	4.8%	5.3%	5.7%	3.0%
Other	41.3%	31.4%	35.4%	31.0%	29.4%	30.8%	26.7%

Source: Geostat, Galt & Taggart Research





# **Annex 5: Commodity prices**





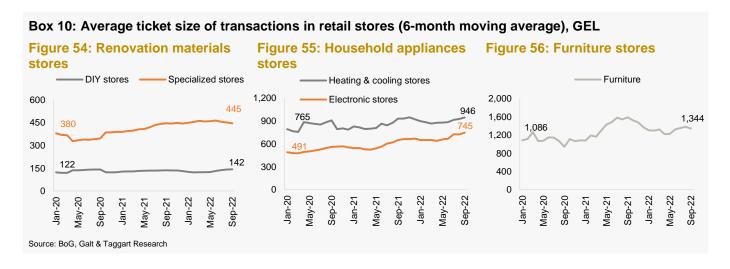
# **Annex 6: Analysis of POS payments**

Average ticket size of POS transactions could be relevant proxy for the estimation of price dynamics on the market, while strong demand also played a role. Overall growth in average ticket size is observed in almost every category - renovation materials, household appliances and furniture.

Renovation materials - average ticket size of transactions was most stable among subsectors. Average ticket size was up 17.2% in specialized stores and 16.4% in DIY stores over Jan-20 to Sep-22. Average ticket size in DIY store has grown the least, probably explained by wide range of goods, allowing customers to shift to cheaper ones.

Household appliances – average ticket size of transactions was more stable in heating & cooling stores compared to general electronic stores. Average ticket size in heating & cooling stores was up 19.3% and 51.9% in general electronic stores over Jan-20 through Sep-22.

Furniture & lighting – average ticket size of transactions in furniture & lighting stores was up 23.8% over Jan-20 through Sep-22. Average ticket size in furniture stores was most bumpy among others and reached records highs in 2H21, before gradual stabilization in 2022.



## Box 11: E-commerce in home improvement sector

Majority of companies have product lists on their website. However, share of e-commerce remains extremely low in home improvement sector. Portion of companies with e-sales is highest in household appliance sector (30%). Scale of e-sales is even lower accounted for maximum 5% of total revenues.

	Portion of companies with product list on a website	Portion of companies with e-sales	Portion of e-sales in total revenues
Renovation materials	68%	12%	<1%
Household appliances	70%	30%	<5%
Furniture & lighting	100%	13%	<1%
Source: BoG, Galt & Taggart Research			





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