

Hon Hai (2317.TW): New 12-inch foundry in Malaysia, MOU with DNex; EV GP exposure up to 10% by 2024E, raising TP to NT\$125

We raise our Hon Hai net income forecasts by 2% / 10% / 21% for 2022-24E, mainly to reflect the company's emerging EV business. We estimate Hon Hai's EV revenue contribution to increase to 5% by 2024E and GP contribution to rise to 10%, driving the company's blended GM to 6.6%. We estimate Hon Hai to enjoy 3.6% global EV market share by 2024E, mainly contributed by Fisker, EVs in the Thailand market (PTT), three MIH models (Model C SUV EV, Model E passenger EV, Model T e-Bus), and e-Truck (Lordstown Motors, [report link](#)). We are positive on Hon Hai's EV expansion, which should help the company to diversify away from the competitive consumer electronics market. With a higher net income, our target price is raised by 10% to NT\$125 (11x 2023E PE). Maintain Neutral.

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Semiconductors in expansion: In mid May, Hon Hai's subsidiary, BIH, said that it signed an MOU with DNex ([link](#)) to set up a JV to build a 12-inch foundry in Malaysia, with planned monthly capacity at 40k wafers, targeting 28nm and 40nm, mainly for power semis, RF, CMOS image sensors, etc. The expansion of Hon Hai's foundry across 6-inch (Macronix's (2337.TW, Not Covered) 6-inch wafer fab in Taiwan, [report link](#)), 8-inch (Sharp), and 12-inch (JV with DNex in Malaysia) should support the company's future expansion in EVs. As we highlighted in March ([report link](#)), Hon Hai aims for 40% of the cars the company makes to use in-house components / semiconductors / software. For semiconductors, via integrating several chips into one chip, Hon Hai aims to empower a car to have stronger efficiency in power consumption, and reduce the weight of the car. Stellantis is the car OEM working with Hon Hai to redesign the usage of chips in EVs: Stellantis is strong in user experience, knowing what functions end consumers prefer, while Hon Hai has semiconductor capability across design, manufacturing, and final packaging and testing. In addition, Hon Hai's position across software (e.g. AI functions in smart cockpit, smart driving, etc.) and hardware (chipsets) could offer better integration, optimizing computing power consumption to realize software functions.

EV long-term target remains: Hon Hai retains its long-term target of 5% global EV market share by 2025E and highlighted its focus on whole car assembly (i.e. software, EEA), followed by module and key components (i.e. battery, advanced EEA control, semiconductors). The company provides total solutions with components, semiconductors and software made in house, lifting the margins vs. pure assembly. Management aims for 40% of the cars the company makes to use in-house

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components / semiconductors / software.

New EV factory in Ohio, US: In mid May, Hon Hai announced that it had completed the acquisition of Lordstown's Ohio factory ([link](#)), where the LMC pickup truck will first enter start of production (SOP) in 2H22. Hon Hai will provide battery modules, and its JV with Lordstown - MIH EV Design LLC - will design new EV models based on the MIH platform. In 2024, Fisker is due to enter SOP and become the main vehicle model produced at the Ohio plant, and management revealed it may take US\$500mn capex investment to adapt its pickup plant into a passenger car factory. Along with that, on the pipeline, management said E-bus (for San-Ti Group) will ship more than 100 units in Taiwan in 2022, and its self-developed Model C targets to ship 5,000 to 10,000 units in 2023. The PTT factory is due to complete construction in Thailand in 2023, and begin production in 2024.

LiDAR for long-distance detection: On LiDAR, management stated they will demonstrate a total solution by the end of 2022, integrating ADAS system and software application. The LiDAR will be using 1550nm wavelength, which could deliver long-distance detection (200m vs. 60-100m of 905nm). By scanning type, the LiDAR is a solid-state LiDAR, using OPA (optical phased array) technology. Hon Hai is now working with 2 customers for the LiDAR solution.

COVID impact on production largely manageable: Management stated that logistics remain the key challenge; however, they said the impact on production is largely manageable. The company's main production sites have adopted closed-loop labor management to ensure the continuation of production. Factories in Taiwan are also in normal operation, and the company implements split operation and grid management to closely track the COVID situation. Besides, the company could leverage its global production sites to offset the impact if the precaution measures escalate.

Earnings revision: We factor in 1Q22 results and break out the automotive business in 2022-24E. We estimate automotive revenues at NT\$34bn / NT\$52bn / NT\$313bn for 2022-24E, or a contribution of 0.6% / 0.8% / 4.9%. With a higher GM (10-15%), we expect the automotive GP contribution at 0.9% / 1.4% / 10.5% for 2022-24E, driving the company's blended GM to 6.6% by 2024E. We estimate Hon Hai to enjoy 3.6% global EV market share by 2024E, mainly contributed by Fisker, EVs in the Thailand market (PTT), three MIH models (Model C SUV EV, Model E passenger EV, Model T e-Bus), and e-Truck (Lordstown Motors). We are positive on Hon Hai's EV expansion, which should help the company to diversify away from the competitive consumer electronics market.

Exhibit 1: Earnings revision

| NT m | 2022E | | | 2023E | | | 2024E | | |
|----------------|-----------|-----------|-----|-----------|-----------|-----|-----------|-----------|-----|
| | Old | New | Chg | Old | New | Chg | Old | New | Chg |
| Revenues | 6,008,778 | 6,051,844 | 1% | 5,781,336 | 6,099,080 | 5% | 5,605,847 | 6,381,821 | 14% |
| GP | 359,428 | 363,524 | 1% | 362,148 | 375,945 | 4% | 354,138 | 420,258 | 19% |
| OP | 148,658 | 150,954 | 2% | 163,984 | 175,860 | 7% | 166,668 | 212,257 | 27% |
| Net income | 139,493 | 142,282 | 2% | 147,127 | 161,152 | 10% | 147,875 | 179,212 | 21% |
| EPS | 9.84 | 10.05 | 2% | 10.38 | 11.38 | 10% | 10.43 | 12.66 | 21% |
| Margins | | | | | | | | | |
| GM | 6.0% | 6.0% | | 6.3% | 6.2% | | 6.3% | 6.6% | |
| OPM | 2.5% | 2.5% | | 2.8% | 2.9% | | 3.0% | 3.3% | |
| NM | 2.3% | 2.4% | | 2.5% | 2.6% | | 2.6% | 2.8% | |

Source: Goldman Sachs Global Investment Research

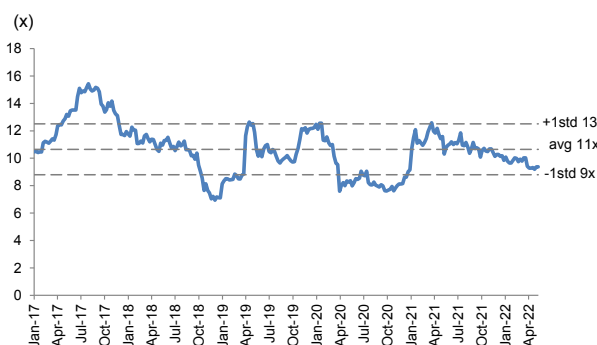
Compared to Bloomberg consensus, our net income is 4% / 2% / 0% below for 2022-24E mainly on lower revenues and GM, reflecting our concerns on the growing competition in the consumer electronics market. With new entrants in the smartphone assembly market, we expect a decline in Hon Hai's market share from its current dominant level.

Exhibit 2: GS vs. Bloomberg consensus

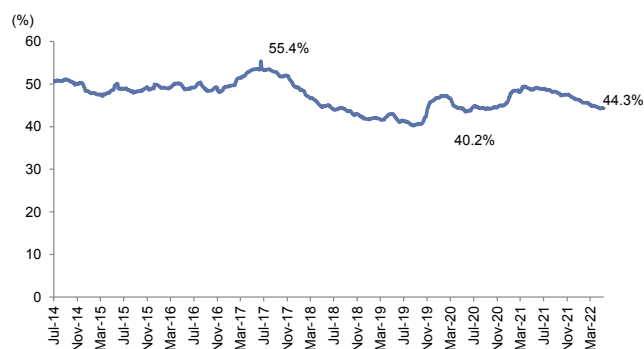
| NT m | 2022E | | | 2023E | | | 2024E | | |
|----------------|-----------|-----------|--------|-----------|-----------|--------|-----------|-----------|--------|
| | GS | BB | Diff % | GS | BB | Diff % | GS | BB | Diff % |
| Revenues | 6,051,844 | 6,169,964 | -2% | 6,099,080 | 6,363,608 | -4% | 6,381,821 | 6,830,668 | -7% |
| GP | 363,524 | 392,664 | -7% | 375,945 | 434,296 | -13% | 420,258 | 487,221 | -14% |
| OP | 150,954 | 171,284 | -12% | 175,860 | 187,490 | -6% | 212,257 | 212,134 | 0% |
| Net income | 142,282 | 147,830 | -4% | 161,152 | 163,702 | -2% | 179,212 | 179,209 | 0% |
| Margins | | | | | | | | | |
| GM | 6.0% | 6.7% | | 6.2% | 6.8% | | 6.6% | 7.1% | |
| OPM | 2.5% | 2.8% | | 2.9% | 2.9% | | 3.3% | 3.1% | |
| NM | 2.4% | 2.4% | | 2.6% | 2.6% | | 2.8% | 2.6% | |

Source: Goldman Sachs Global Investment Research, Bloomberg

Valuation: We continue to use P/E methodology to derive our target price. We keep our target P/E multiple unchanged at 11x, which is in line with the company's historical trading average. With higher 2023E earnings, our target price thus rises by 10% to NT\$125 (11x 2023E PE). Maintain Neutral given limited upside to our target price.

Exhibit 3: Hon Hai 12M forward P/E ratio

Source: Bloomberg

Exhibit 4: Hon Hai QFII holdings

Source: TEJ

Upside risks: Better-than-expected outlook for iPhone shipments; lower-than-expected opex ratio caused by a further increase in automated production, or further cost control on SG&A.

Downside risks: A strong USD against RMB/TWD is a key downside risk given Apple is its main customer, contributing to 40-50% of revenues based on our estimates. Hon Hai's factories are located mainly in mainland China, with costs based in Rmb.

| | | | |
|----------------|-------------------------------------|--------------------------|----------------------|
| 2317.TW | 12m Price Target: NT\$125.00 | Price: NT\$107.00 | Upside: 16.8% |
|----------------|-------------------------------------|--------------------------|----------------------|

| Neutral | GS Forecast | | | | |
|---|------------------------------|--------------------|--------------------|--------------------|--------------------|
| | 12/21 | 12/22E | 12/23E | 12/24E | |
| Market cap: NT\$1.5tr / \$49.9bn | Revenue (NT\$ mn) New | 5,994,173.9 | 6,051,843.7 | 6,099,079.9 | 6,381,820.7 |
| Enterprise value: NT\$1.3tr / \$44.7bn | Revenue (NT\$ mn) Old | 5,994,173.9 | 6,008,778.1 | 5,781,335.9 | 5,605,847.5 |
| 3m ADTV: NT\$2.7bn / \$95.2mn | EBITDA (NT\$ mn) | 224,440.7 | 231,854.9 | 260,783.6 | 299,972.0 |
| Taiwan | EPS (NT\$) New | 9.90 | 10.05 | 11.38 | 12.66 |
| Greater China Technology | EPS (NT\$) Old | 9.90 | 9.84 | 10.38 | 10.43 |
| M&A Rank: 3 | P/E (X) | 11.3 | 10.6 | 9.4 | 8.5 |
| Leases incl. in net debt & EV?: No | P/B (X) | 1.1 | 1.0 | 1.0 | 0.9 |
| | Dividend yield (%) | 3.6 | 3.7 | 3.7 | 3.7 |
| | CROCI (%) | 13.5 | 13.3 | 14.1 | 14.0 |
| | | 12/21 | 3/22E | 6/22E | 9/22E |
| | EPS (NT\$) | 3.13 | 2.08 | 2.17 | 2.59 |

Source: Company data, Goldman Sachs Research estimates, FactSet. Price as of 18 May 2022 close.

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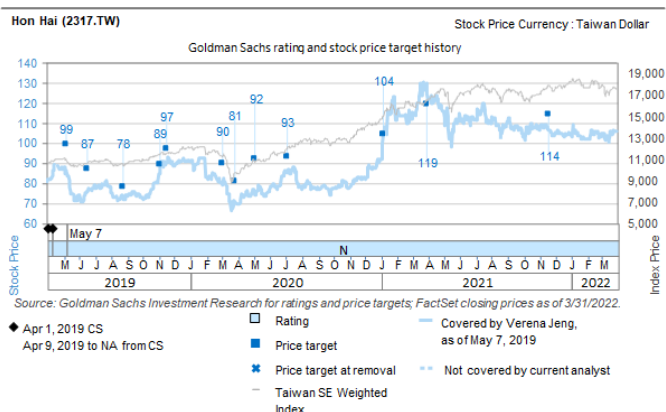
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