

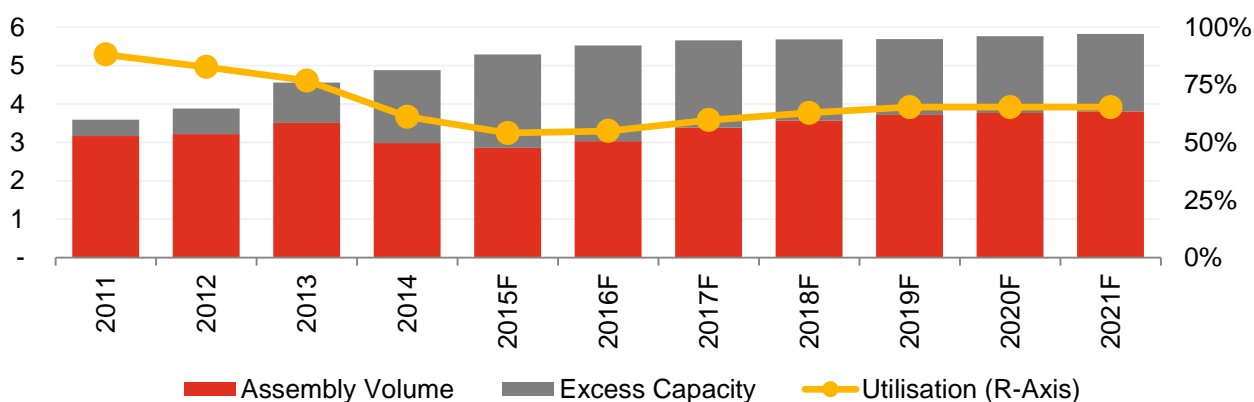
## Brazil: Sitting idly by

### *Another year of decline is expected for the market*

Despite various programs and initiatives to keep the automotive market on track in Brazil, the industry is expected to experience the worst decline in decades in 2015. As plants are idling for weeks at a time and inventory grows, serious doubts are growing within the once-hot market.

#### Light Vehicle Assembly

2011 – 2021 (millions)



Source: Autofacts2014 Q4 Forecast Release

#### Sustained deceleration

Amidst the backdrop of the worst economic climate in over a decade, Brazil's automotive industry is now reeling. While the country remained the world's fourth-largest automotive sales market, it was surpassed by Mexico in total assembly in 2015. Both sales and assembly volumes have continued to deteriorate throughout the year, resulting in industry associations such as ANFAVEA to lower their forecasts. Multiple factors are at play in this current market contraction including growing inflation, rising unemployment, increased taxes, tightening credit and higher interest rates. These compounding factors have weakened overall consumer appetite, battering a market that was once seen as a high-potential destination. Now mired by this economic sludge, automakers are facing difficult decisions ahead.

#### Holding pattern

Across the board, assemblers are feeling the pains of the market contraction. A number of automakers have opened or announced plans to open plants in Brazil thanks to their INOVAR-Auto program, which levied exorbitant import taxes unless automakers assembled a certain percentage of their fleet domestically. Since the program's inception in 2012, announcements of new capacity investments have poured in, even as the market began showing signs of slowing down. In 2014 alone, \$23m USD was invested thanks to INOVAR-Auto, from new assembly plants to expansion at existing plants. While the legislation accomplished its primary goal of spurring domestic investment and stemming the tide of import vehicles, the market has continued to slide. Many of these announcements have now been put on hold, and those whose investments have

come online are now facing overcapacity concerns. As the sales slump worsens and inventory rises, layoffs and mandatory leaves have hit an increasing number of plants. ANFAVEA estimates that over 6,000 workers have been laid off in 2015 through May, and an additional 20,000 have been furloughed. Meanwhile, inflation continues to rise as the economy shrinks, the market is now in a precarious situation.

### Widespread struggles

With plants becoming increasingly idle, existing and future investments are now in question. Just two to three years ago, Brazil was a target for Chinese automakers as an ideal market to extend their brand globally. With no true domestic brand to contend with and a growing middle class that yearned for new cars, ten Chinese brands announced plans for local assembly after INOVAR-Auto was enacted. Since then, only one plant has opened, and little has been heard of the remaining nine beyond delays and postponements. The struggles reach beyond emerging brands as sluggish sales have pummeled the entire industry. Well-established market favorites are being squeezed as well, leading to more layoffs and furloughs for the remainder of the year. In the wake of this downturn, the subsidies have been cancelled, restoring the Industrial Products (IPI) tax to its originally announced levels. With such a stifling macroeconomic environment, new car registrations and assembly forecasts are down 20% and nearly 18% respectively through May. The

Autofacts forecast has Brazil continuing on this downward path with registrations expected to decline by ~21% and assembly to contract by ~17% for the full year.

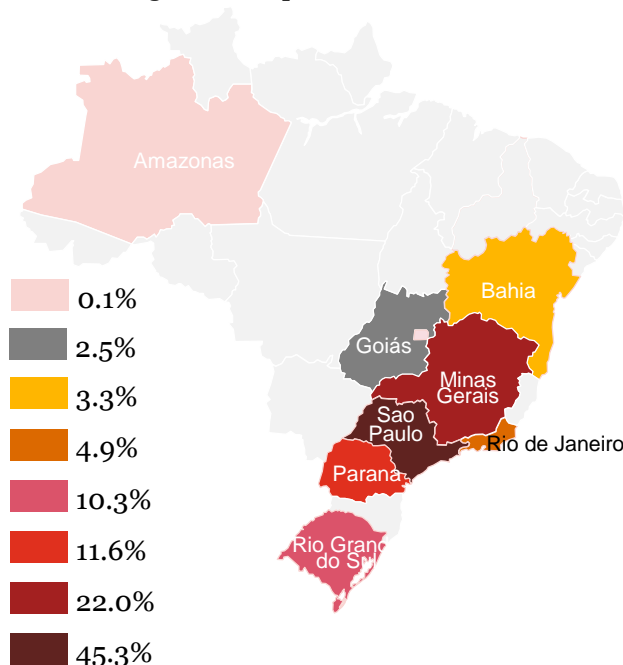
### Overstimulation

Given the current roadblocks in Brazil, the mid to long term outlook has been revised downward. The primary concern now revolves around excess capacity. The INOVAR-Auto program incentivized automakers to establish or expand their Brazilian assembly presence to avoid the high import taxes. Now with a lagging market, the additional capacity is expected to remain underutilized. By 2021, registrations are forecasted to reach ~3.6 million units, still less than the volume seen in 2012, while assembly is expected to reach ~3.8 million units. At this volume, utilization will hover around 65% to 70%. Generally speaking, the industry consensus rate for break even is 70%, with profitability achieved around 80% utilization.

Given this lagging utilization, automakers may need to reconsider their strategy in Brazil. Market favorites will need to right size their operations while newcomers should reevaluate their plans for entry. Assembling in Brazil is now a double-edged sword. To continue selling in the market and avoid the exorbitant taxation, automakers must maintain local assembly – albeit with limited profit margins. Regardless of what will be done, the road ahead for Brazil will be bumpy at best.

### Geographic Distribution Production

2014 (% of light vehicle production)



### IPI Tax Increase

2015 (effective January 1)

| Engine Size                         | 2014 rate | 2015 rate |
|-------------------------------------|-----------|-----------|
| Less than 1.0l engine               | 3%        | 7%        |
| Between 1.0 – 2.0l flex fuel engine | 9%        | 11%       |
| Between 1.0 – 2.0l gasoline engine  | 10%       | 13%       |
| Greater than 2.0l flex fuel engine  | 18%       | 18%       |
| Greater than 2.0l gasoline engine   | 25%       | 25%       |
| Light truck and utility vehicles    | 3%        | 4% - 8%   |

Source: Autofacts Analysis, ANFAVEA