Global Automotive Comparative Policy Review

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Introduction and context

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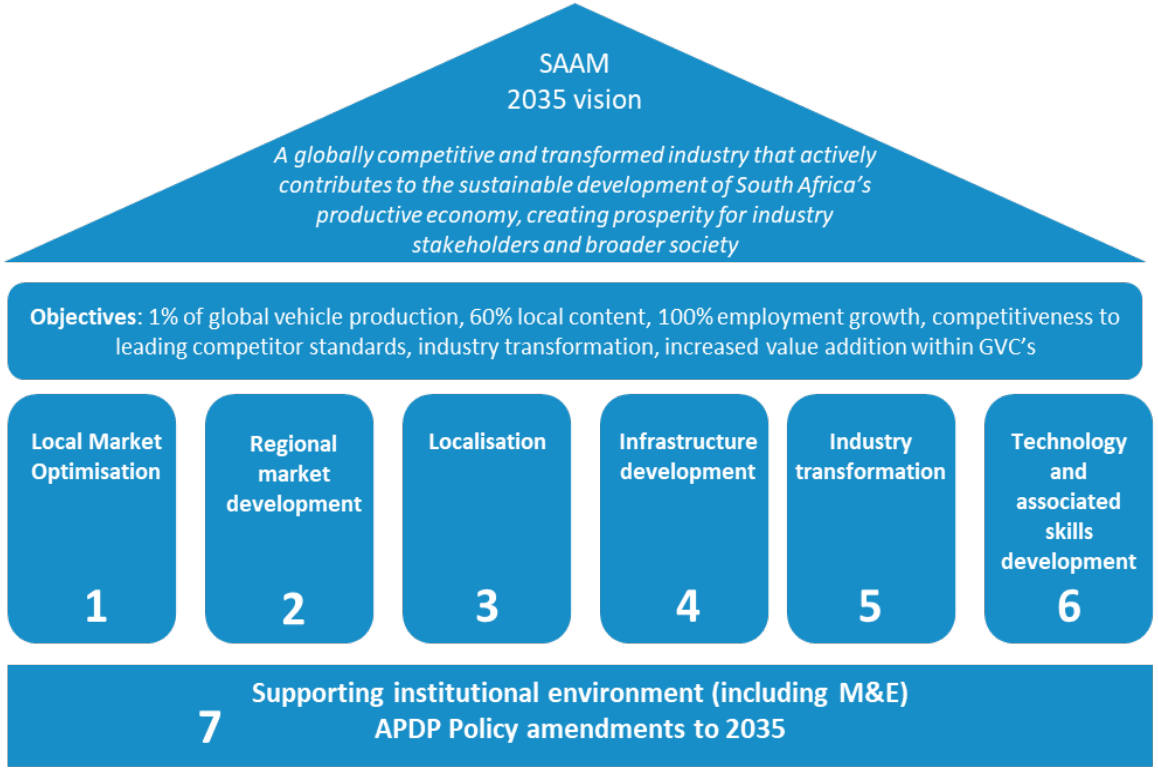

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Comparative market access and production dynamism of 12 selected economies and South Africa

Economy	Vehicle market (2019)	Sales global ranking	Major PTA advantages	PV CBU duty	LCV CBU duty	Vehicle Production (2015)	Production CAGR 2010-18	Production global ranking	Market depth rating*	Market protection rating*	Incentive support rating*	Growth rating*
India	3 816 891	5th	GCC; ASEAN	100%	35%	4 524 366	3.1%	5th	5	5	2	1
Brazil	2 787 850	6th	MERCOSUR	35%	35%	2 944 988	-1.7%	8th	5	4	2	1
Mexico	1 359 671	14th	NAFTA	50%	50%	4 013 137	7.0%	6th	4	4	3	4
Australia	1 034 379	16th	ASEAN; USA	5%	5%	5 606	-37.6%	48th	3	1	1	1
Turkey	491 909	25th	EU, MENA	10%	22%	1 461 244	3.7%	14th	3	2	4	2
Thailand	1 007 552	17th	ASEAN	80%	40%	2 013 710	2.6%	11th	3	4	4	4
Malaysia	604 287	21st	ASEAN	30%	30%	571 632	0.1%	23rd	3	3	4	2
South Africa	536 611	23rd	EU; AGOA	25%	25%	631 921	3.7%	22nd	3	3	4	2
Egypt	170 000	43rd	GAFTA; EU	40%	135%	18 500	-20.6%	45th	2	5	3	1
Morocco	165 916	44th	EU, GAFTA; US	25%	25%	403 218	32.6%	26th	1	3	4	5
Slovakia	113 863	53rd	EU	10%	22%	1 107 902	8.9%	18th	1	2	3	4
Nigeria	9 800	100th	AGOA	70%	35%	-	-	-	1	5	1	1
Kenya	5 643	112th	AGOA	25%	25%	-	-	-	1	3	1	1

How do we benchmark South Africa?

1. Market size
2. Production
3. Dynamism (CAGR)
4. Market structure (MNC led, Second tier production)

* Rating: 5=very high, 4=high, 3=average, 2=low, 1=very low.

The four economies from which South Africa had the most to learn:

Thailand

- Successful industry growth since 2000 on back of industry Masterplan

Malaysia

- Attempted to develop its auto industry through a national vehicle development programme

Turkey

- Successful industry growth since 2000; major industry upgrading

Morocco

- Aggressive growth of its automotive industry since 2012

- Malaysia
- Turkey
- Morocco
- Thailand
- Contextualising the comparator economy findings for Africa

Support appears to be concentrated on protecting domestic markets, securing preferential market access to large, developed economies or regional markets, alongside major asset establishment support

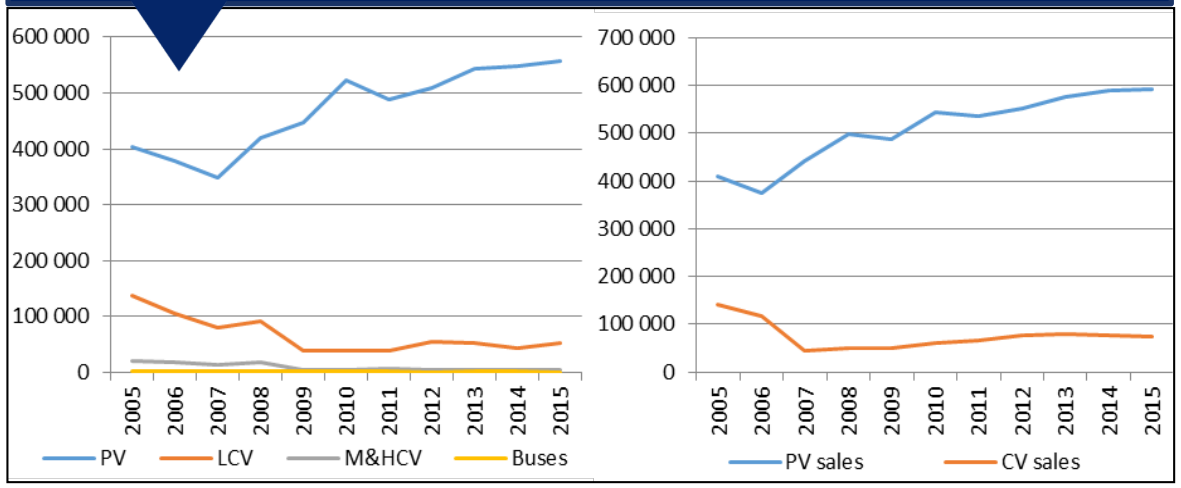
Malaysia		Recovering from failed national car programme. Support for R&D and technologically advanced infrastructure, and clear focus on deepening capabilities in particular areas of product specialisation
Turkey		Government support is also less focused on attracting investments from new industry players. Support framed by aggressive investment support and advancing industry skills and technology
Morocco		Morocco appears to have focused on mitigating investment risk by providing significant investment support, advanced auto infrastructure and large scale skills development support for investors
Thailand		Government support appears to be less focused on attracting investments from entirely new industry players, and more focused on deepening the activity of existing auto investors

1. Malaysia

Malaysia has developed an established auto industry over the past 50 years

Indicator	Values
Population 2014*	29,901,997
GDP per capita PPP 2014 (nominal)*	US$25,638
Total number of vehicles in operation†	12,228,000
Estimated ratio of people to vehicles	1.39
Passenger vehicle production (2015[i])	558,324
Passenger vehicle sales (2015)	591,298
Light commercial vehicle production (2015)	52,370
Truck production (2015)	3,460
Bus production (2015[i])	517
Commercial vehicle sales (2015)	75,376
Motorcycle production (2015)	382,218
Motorcycle sales (2015)	380,802

Malaysian production (left) and sales (right)



Key findings

- Malaysia has a reasonably large market, with similar sales to SA
- Exports and imports are low, suggesting a strong domestic market orientation and protection afforded to local manufacturers
- Malaysian auto industry represents 1.3% of the industry in Asia-Pacific
- Malaysia has targeted the development of EEVs for the regional market, and the promotion of investment in more advanced technologies through customised incentives for OEMs, as well as tax and duty exemptions
- Malaysian PV sales have increased in recent years, due to the partial liberalisation of the domestic market (to ASEAN), higher levels of economic growth and improved consumer purchasing power

Malaysia's auto industry has come under pressure, in part due to the extension of the ASEAN agreement to the auto industry

Trade agreements		
Agreement type	**Partners**	**Date effective**
Multilateral	WTO	1995
Free Trade	Australia	2013
Free Trade	Chile	2012
Free Trade	India	2011
Free Trade	Japan	2006
Free Trade	New Zealand	2010
Free Trade	Pakistan	2008
Free Trade	Turkey	2014

Product category	HS code	Applied MFN tariffs			WTO Bound Rates		
		Avg. AV duties	Min AV duty	Max AV duty	Avg. AV duties	Min AV duty	Max AV duty
CBU/assembly tariffs							
Buses	HS 8702	20.0	0.0	30.0	Unbound		
Cars	HS 8703	21.8	0.0	30.0			
Commercial Vehicles	HS 8704	19.9	0.0	30.0			
CKD tariffs	HS 8707	18.8	0.0	30.0			
Motorcycles	HS 8711	19.7	0.0	50.0			
Selected components							
Brake pads	HS 870830	17.5	5.0	30.0	30.0	30.0	30.0
Elec. Wipers	HS 851240	0.0	0.0	0.0	25.0	25.0	25.0
Tyres	HS 401110	40.0	40.0	40.0	40.0	40.0	40.0
Radiators	HS 870891	15.0	5.0	25.0	0.0	0.0	0.0
Windscreen	HS 700721	30.0	30.0	30.0	30.0	30.0	30.0

Key findings

- Malaysia is a WTO and ASEAN member. It has also signed FTAs with Japan, India and Chile, among others. As an ASEAN member, Malaysia is also party to PTAs with China, the EU, and Korea
- Until recently, Malaysia had CBU tariffs of +100%, effectively locking out international competition from the domestic market
- Bans on FDI into the Malaysian auto industry gave huge impetus to Proton and Perodua, the two national auto champions. Both failed to elevate their competitiveness to international levels as a result of protectionism, with Perodua improving recently by involving Daihatsu as a JV partner
- The government opened the industry to competition through the ASEAN auto agreement, and a reduction in MFN tariffs

The Malaysian experience offers an important lesson from a regional integration perspective and highlights both the opportunities and challenges of trade integration

Observations

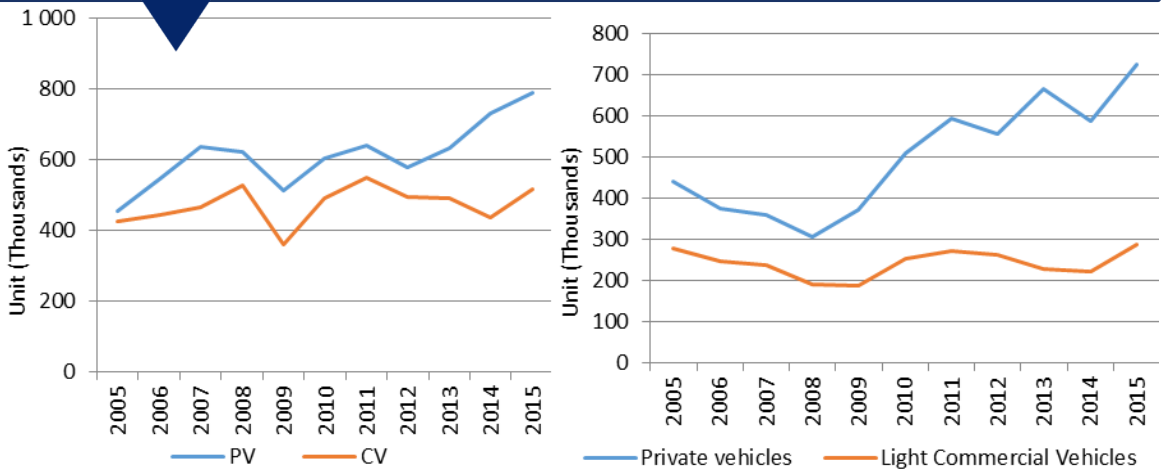
- **Development of a 'national car':** Malaysia made a sustained effort to develop a 'national car'. The experience has not been successful and demonstrates the perils of such a strategy especially in a country with a limited market
- **Deterrence of foreign direct investment:** The existence of favoured 'national car' projects and associated restrictions has deterred foreign car makers from using Malaysia as an export platform, at least until recently. Perodua's relative recent performance versus Proton's performance is most instructive
- **Malaysia's automotive export performance:** Malaysia's automotive export performance in relation to that of Thailand has been dismal and the country runs a significant trade deficit in the sector
- **Regional trade integration:** The Malaysian experience highlights both the opportunities and challenges of trying to integrate trade in a region where a number of countries are trying to advance the sector in question. The lessons of schemes such as AICO could be useful in the African context

2. Turkey

Turkish auto policy has focused on expanding existing investments and upgrading technology through the use of R&D and investment incentives

Indicator	Values
Population 2014*	75,932,348
GDP per capita PPP 2014 (nominal)*	US$19,787
Total number of vehicles in operation†	14,373,000
Estimated ratio of people to vehicles	5.28
Passenger vehicle production (2015[i])	791,027
Passenger vehicle sales (2015)	725,596
Light commercial vehicle production (2015)	516,011
Truck production (2015)	35,838
Bus production (2015[i])	15,920
Commercial vehicle sales (2015)	285,598
Motorcycle production	None

Turkish production (left) and sales (right)



Key findings

- Turkey's auto industry has exhibited strong growth over the past 10 years, despite competition from CE locations with better EU proximity
- Investment expansion has been focused on existing, rather than Greenfield investments
- Turkey is now the 14th largest auto producer worldwide, laying claim to 1.5% of global production.
- Local production is substantially larger than domestic sales for PVs and LCVs. Production is largely delinked from domestic market consumption
- EU exports drive Turkish production growth and investment. However, strong domestic sales growth since 2005 is evident, putting pressure on the industry's trade balance

Growth in the domestic Turkish market is constrained by high consumption taxes on PVs. Consumers nonetheless continue to trade up…

Trade agreements

Agreement type	Partners	Date effective
Multilateral Agreement	WTO	1995
Free Trade Agreement	EFTA	1 April 1992
Free Trade Agreement	Israel	1 May 1997
Free Trade Agreement	Macedonia	1 September 2000
Free Trade Agreement	Croatia	1 July 2003
Free Trade Agreement	Bosnia and Herzegovina	1 July 2003
Free Trade Agreement	Palestine	1 June 2005
Free Trade Agreement	Tunisia	1 July 2005
Free Trade Agreement	Morocco	1 January 2006
Free Trade Agreement	Syria	1 January 2007
Free Trade Agreement	Egypt	1 March 2007
Free Trade Agreement	Albania	1 May 2008
Free Trade Agreement	Georgia	1 November 2008
Free Trade Agreement	Montenegro	1 March 2010
Free Trade Agreement	Serbia	1 September 2009
Free Trade Agreement	Chile	1 March 2011
Free Trade Agreement	Jordan	1 March 2011
Free Trade Agreement	South Korea	1 May 2013
Free Trade Agreement	Mauritius	1 June 2013

Product category	HS code	Applied MFN tariffs			WTO Bound Rates		
		Avg. AV duties	Min AV duty	Max AV duty	Avg. AV duties	Min AV duty	Max AV duty
CBU/assembly tariffs							
Buses	HS 8702	12.9	10.0	16.0	19.7	19.4	20.0
Cars	HS 8703	9.7	5.0	10.0	19.7	19.4	20.0
Commercial Vehicles	HS 8704	12.1	0.0	22.0	19.1	19.0	20.0
CKD tariffs	HS 8707	4.5	4.5	4.5	33.2	32.8	33.6
Motorcycles	HS 8711	6.7	6.0	8.0	Unbound		
Selected components							
Brake pads	HS 870830	4.0	3.0	4.5	17.4	17.0	17.8
Elec. Wipers	HS 851240	2.7	2.7	2.7	26.3	26.3	26.3
Tyres	HS 401110	4.5	4.5	4.5	26.3	26.3	26.3
Radiators	HS 870891	3.9	3.0	4.5	17.4	17.0	17.8
Windscreen	HS 700721	3.0	3.0	3.0	26.3	26.3	26.3

Key findings

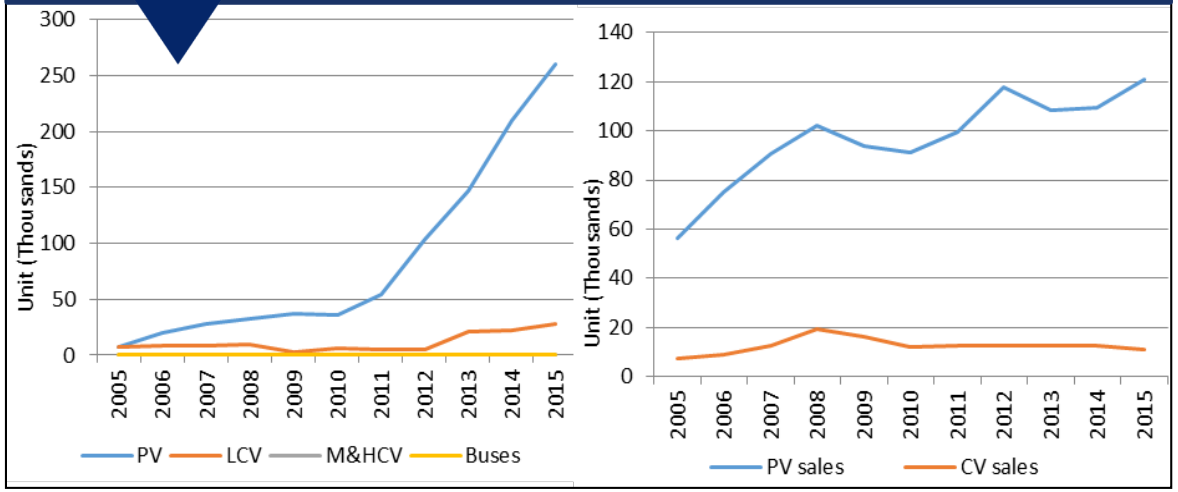
- Turkey has a sophisticated set of NTBs to ensure its market is not penetrated by low quality imports: homologation requirements, service infrastructure
- **Tax regime** is based on engine displacement: 45% tax is levied on 1.6L engines, increasing to 90% on 1.6-2.0L engines, and 145% on vehicles with larger engines. These rates have increased over time. Fuel taxes channel demand to diesel engines
- Taxes drive a preference for small engine, diesel cars in the domestic market
- Turkey's production is focused on exports (primarily to the EU). Given low growth opportunities in the EU, Turkey has also been looking to establish PTAs with the US , MENA, and, until recently, Russia

3. Morocco

Morocco's close proximity to, and FTA with, the EU makes it an attractive destination for market-seeking investors

Indicator	Values
Population 2014*	33,921,203
GDP per capita PPP 2014 (nominal)*	US$7,490
Total number of vehicles in operation†	3,397,000
Estimated ratio of people to vehicles	9.99
Passenger vehicle production (2015[i])	260,129
Passenger vehicle sales (2015)	120,875
Light commercial vehicle production (2015)	28,200
Truck production (2015)	None
Bus production (2015[i])	None
Commercial vehicle sales (2015)	11,035
Motorcycle production	Not available

Moroccan production (left) and sales (right)



Key findings

- Moroccan auto industry has shown excellent growth: To 260,129 units of production in 2015 – with strong export orientation
- Renault-Nissan operates two assembly plants: in Casablanca and Tangier. PSA building plant in Kenitra. VW negotiating new plan
- With annual production capacity of 340,000 units, the Tangier plant is the largest vehicle assembly plant within Africa and GAFTA
- Well-developed infrastructure including modern roads and ports with ample capacity (6 million containers per annum) position Morocco as a gateway to emerging markets in MENA
- While the domestic market has seen healthy growth, it is at levels far below the production growth rate

Morocco's FTAs provide duty-free access to 1bn consumers across the globe

Trade agreements

Agreement type	Partners	Date effective
Industrial free-trade zone	European Union	1 March 2000
Free Trade Agreement	United States	1 July 2005
Free Trade Agreement	EFTA	1 March 2000
Free Trade Agreement	Turkey	7 April 2004
Free trade zone	Members of Arab League	1 January 1988
Free Trade Agreement	Egypt, Tunisia and Jordan	1 January 2005

Tax free zones

Tangier Free Trade Zone	Home to a large contingent of auto component suppliers
Tangier Automotive City	Home to the Renault-Nissan Tangier plant and a number of auto component suppliers
The Tecnopolis Free Zone	In Sale, near the capital Rabat. Is the location of component suppliers and is located midway between Renault-Nissan Tangier and the SOMACA plant in Casablanca
The Atlantic Free Zone	Situated in Kenitra – is to be established for the forthcoming Peugeot-Citroen plant

Key findings

- Moroccan auto industry success is based on its blending of geographical proximity advantages (to the EU), a FTA with the EU, and substantial investment in auto-related infrastructure
- The industry's success is reflected in the country's vehicle export performance: in 2014, 89% of vehicle production was exported
- Tax free zones have become a central aspect of industrial policy in Morocco: Duty free trade in components and vehicles with the EU, and between free trade zones in Morocco
- Industrial policy and investment incentives lack transparency at the OEM level, but are clear and focused on developing and deepening supply chain capabilities through the identification of key localisation opportunities – "eco-system" focus

Auto investors are offered a range of incentives, the most notable of which are contingent on investment in FTZs

Investment incentives	• Major investments in Tangier (Renault) and Kenitra (Peugeot-Citroen) appear to have been privately negotiated deals - not possible to identify their nature or magnitude • Component manufacturer support provided through Investment Promotion Fund and Hassan II Fund
Land support	• IPF takes charge of 20% of the expense of land acquisition necessary for the realisation of investment
External infrastructure	• IPF contributes to the expenses of external infrastructure, up to 5% of the overall investment value (10% in suburban, rural areas)
Training	• IPF participates in the expense of vocational training provided as part of the investment project, up to 20% of the total training cost. 3,669 employees were trained at the in-house training facility, and skills transfer programmes at the plant have been very successful.
Hassan II Fund	• Can support up to 30% of the cost of professional buildings up to a maximum of MAD 2,000/m2 (US$203/m2) • Can contribute up to 15% of the purchase cost of new equipment/goods

Turkey's incentives represent a coherent, consistent and successful application of industrial policy – most notably in respect of R&D

Observations and relevance

- **Industry Growth:** Despite a large and growing domestic market, industry growth remains highly reliant on the EU vehicle market, a situation facilitated by the Turkey-EU customs agreement. Turkey has limited options for market protection, and levies high consumption taxes on domestic vehicle sales to channel (and limit) domestic demand
- **Non-trade barriers (NTBs):** These are focused on M&HCVs sourced from outside the EU. As an intermediate capital input, the Turkish government insists on M&HCV importers having service infrastructure, with each service station having to contain an extensive list of critical components, to ensure that low quality M&HVCVs are not periodically "dumped" in the Turkish market
- **Significant investment support:** Investment support is clearly defined and standardised across OEMs, component manufacturers and new and existing investors. While the Turkish government's investment support framework has been successful in attracting new models at existing OEMs, Greenfield investments have been (intentionally) less prolific
- **R&D:** Turkey's R&D incentive scheme has been particularly successful, and has driven value addition as Turkish firms become increasingly involved in auto design and product development
- **Turkish policy:** Represents an instructive example of how to structure a comprehensive incentives package that deepens industry value addition to more technologically advanced, higher skilled areas over time. Transparency is also a key feature of Turkish auto policy

Morocco's incentive structure leverages its EU proximity, and transport and logistics infrastructure, to develop a competitive auto industrial base

Observations and relevance

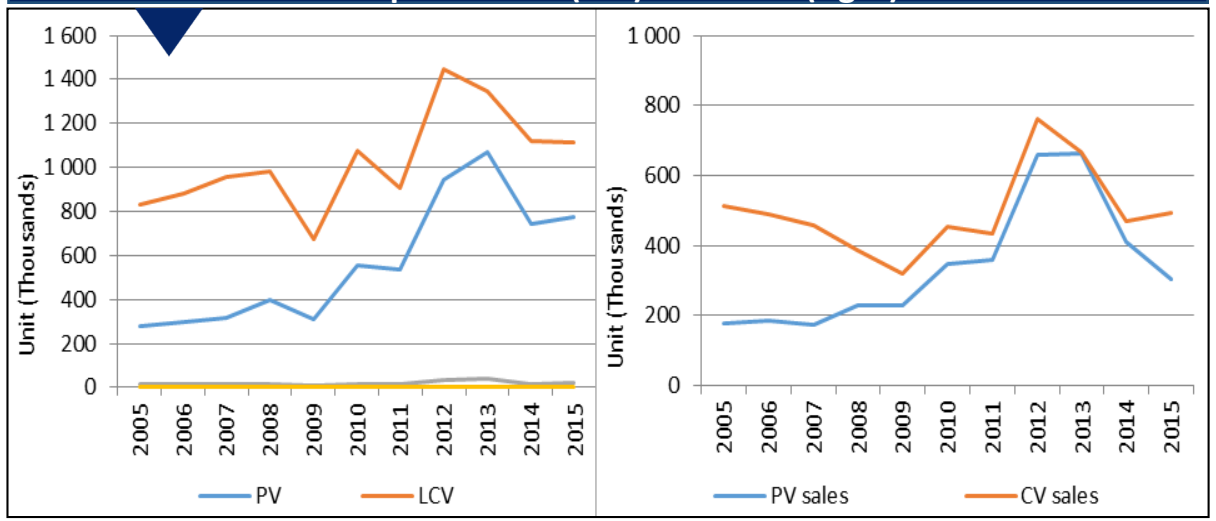
- **Duty free access to the EU:** Morocco's European market proximity, coupled with an excellent transport and logistics infrastructure has allowed it to capitalise on its geopolitical advantage compared to many other developing country production locations
- **Favourable geographical location:** Morocco's favourable geographical location alone has been insufficient in the past to foster growth in the automotive industry, and the national government's investment incentives package has therefore played a key role in developing the sector, and continues to do so
- **Investment support:** Bilateral deals with OEM MNCs likely to have been very significant to secure investments; supply chain then "crowded in" through more standardised package of support: land, buildings and equipment
- **Training:** has been identified as one of the key pillars of Morocco's industrial policy. The government has been very active in funding training centres to provide industry with an appropriately skilled labour force
- **Factor cost advantages:** Moroccan agencies focused on using wage rates, and low infrastructure and logistics costs as key source of competitive advantage versus EU competition

4. Thailand

Given the size of its economy, Thailand has established a significant automotive industry with a strong export orientation

Indicator	Values
Population 2014*	67,725,979
GDP per capita PPP 2014 (nominal)*	US$15,735
Total number of vehicles in operation†	15,604,000
Estimated ratio of people to vehicles	4.34
Passenger vehicle production (2015[i])	772,250
Passenger vehicle sales (2015)	304,872
Light commercial vehicle production (2015)	1,115,880
Truck production (2015)	22,700
Bus production (2015[i])	4,590
Commercial vehicle sales (2015)	492,707
Motorcycle production (2013)	2,218,625
Motorcycle sales (2013)	2,004,498

Thai production (left) and sales (right)



Key findings

- The country has emerged as a leading international producer of vehicles
- Growth of the auto industry due to regional integration within ASEAN and a comprehensive investment policy regime
- c70% of Thai production comprises LCVs. However, the industry has diversified, manufacturing PVs, trucks, buses and motor cycles in 2015
- Thailand has positioned its domestic auto industry to be increasingly export-oriented, while at the same time remaining dominant in the domestic market
- Thailand's domestic market experienced difficulties with sizable market contractions in 2014 and 2015, leading to marginal production growth in 2015

The growth of Thailand's automotive industry is to a large extent a result of its own market growth and proximity to other major developing economies

Trade agreements		
Agreement type	**Partners**	**Date effective**
Multilateral Agreement	WTO	1995
Free Trade Area	ASEAN	1992
Free Trade Agreement	Australia	2005
Free Trade Agreement	India	Pending
Free Trade Agreement	Japan	2007
Economic Partnership	New Zealand	2005
Free Trade Agreement	Peru	2003
Free Trade Agreement	Chile	Pending

Market protection	**HS code**	Applied MFN tariffs		
		Avg. AV duties	**Min AV duty**	**Max AV duty**
CBU/assembly tariffs				
Buses	HS 8702	40.0	40.0	40.0
Cars	HS 8703	80.0	80.0	80.0
Commercial Vehicles	HS 8704	40.0	40.0	40.0
CKD tariffs	HS 8707	30.0	30.0	30.0
Motorcycles	HS 8711	60.0	60.0	60.0
Selected components				
Brake pads	HS 870830	22.0	10.0	30.0
Elec. Wipers	HS 851240	10.0	10.0	10.0
Tyres	HS 401110	10.0	10.0	10.0
Radiators	HS 870891	30.0	30.0	30.0
Windscreen	HS 700721	10.0	10.0	10.0

Key findings

- Thailand is an ASEAN member, and is party to a variety of trade agreements
- ASEAN FTA has opened access to Malaysia, Singapore, Indonesia and a number of smaller economies
- To complement its export orientation, the government has negotiated FTAs with countries in the wider Asian region
- Local **market protection** channels demand for locally produced LCVs, PVs, motorcycles, and buses
- OEMs have identified Thailand as a **high-potential, high local content** production location, with access to a **large and growing regional export market** both for CBU and CKD production and assembly

Thailand evolves its autos policy every 5 years – with framework to align with economic imperatives.

Incentives are geographically determined	• A network of IDZs provide different levels of support in respect of duty and corporate tax exemptions for various time periods. The level of support differs by region, and sector
Differential excise taxes	• Applied to the LCV and passenger vehicle segments, on the basis of engine size. More recently, differential excise taxes have also been applied according to vehicle CO^2 emission levels, further encouraging domestic market consumption of small vehicles. This channels domestic demand in favour of "eco cars" and LCVs
Tax- based incentives	• Exemptions from customs and VAT for imported machinery and equipment; regionally-based CIT reductions (up to 80%) dependent on location. Investments of at least US$416m that produce more than 100,000 CBUSs a year (within 5 years) can be exempt from CIT for 5 years (8 years for eco cars).
Generous incentives	• Thailand BOI offers CIT holidays for 5 years, duty free imports of machinery, and reduced excise taxes of 17% compared to the standard 30% for conventional passenger cars • Include personal income tax exemptions for highly skilled expatriates who work in the promoted industry, and the granting of permanent residency for such individuals
Market stimulation mechanisms	• Limited-duration first-car incentive to BHT100,000 (applicable of certain locally produced cars, subject to a five year ownership rule

Thai auto policy has rigorously targeted the channeling of domestic demand and the achievement of economies of scale

Observation
• The Master Plan defines the industry vision and situates policy and related industry development instruments • Volume requirements stipulated to qualify for government support • Prescribed levels of local content • Differential excise taxes applied to LCV and PVs • Differential excise taxes based on engine size; more recently differential excise taxes applied according to CO^2 emissions. • PTAs/FTAs: ASEAN, Japan FTA and Australia FTA. Minimum 40% local content required to comply with rules or origin under key agreements • Market stimulation: Tax structure encourages consumption of LCVs, PPVs and eco cars. Limited duration first car incentive of Baht 100,000. Applicable to certain types of locally produced cars. Subject to 5 year ownership

Relevance

• Local content and 'local processing' requirements create the basis for scale economies that enable the development of supply chain capabilities
• High levels of protection for domestic producers => what is sold in Thailand is largely made in Thailand.
• Excise tax regime influences relative pricing of CBUs in domestic market => scale created behind certain model types and therefore certain technologies
• Regional integration - access to large and growing regional export markets for both CBU and CKD:
  • CKD hub opportunity adds scale in supply chain and converts threat of neighbouring economies into potential opportunities
  • Minimum 40% local/regional content required
• Market stimulation => around 1 million additional new vehicles produced in 1 year. Long term impact uncertain
• Support from government clear. Will step outside of policy framework in event of crisis

Contextualising the comparator economy findings

Comparator economy evidence suggests securing and sustaining auto investments requires a combination of market-access and asset-based government incentives

Basic investment (and associated production) narrative that emerges from the review of the comparative auto producing economies appears to largely follow four stages:

1

Attracting an initial OEM investment that is sufficiently meaningful to build a centre of gravity for a future automotive industry. This investment is generally very heavily incentivised, e.g., Morocco, Thailand, Turkey

2

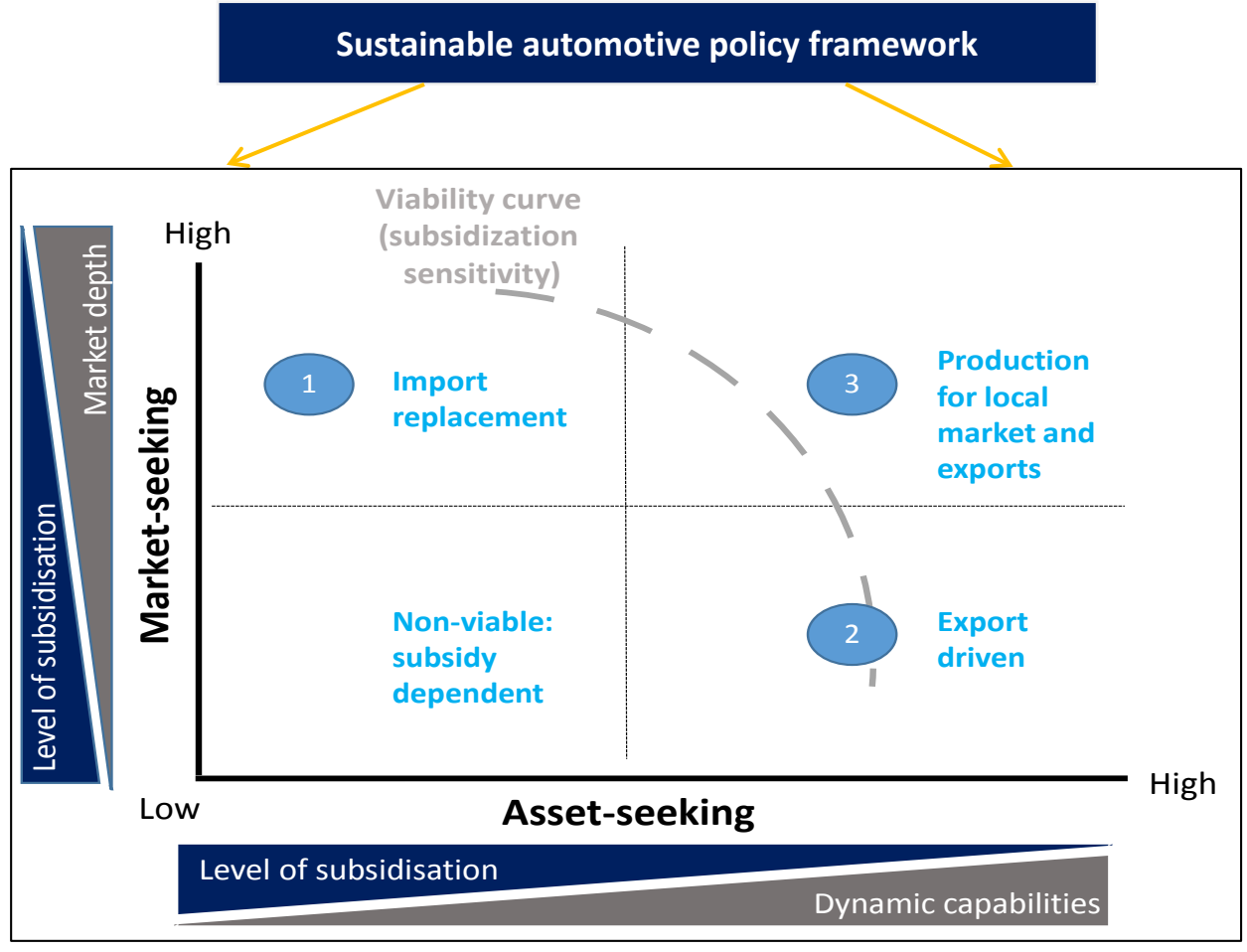
Securing the initial OEM investment, by following through on the establishment of required skills, bulk infrastructure supply, required support institutions, etc. Key to this stage is proving the competitiveness of the initial investment made, thereby encouraging production for markets beyond the confines of the domestic market

3

Deepening OEM investments, either through the expansion of the initial investment, and/or the attraction of additional OEM investments. This stage represents the development of an actual auto industry, as opposed to simply incentive-induced auto activity

4

Developing the auto component manufacturing supply chains behind OEM investments (and broader value chain services), and hence value adding activities within the broader auto industry



Domestic/regional market advantage secured from investing in an economy, with increased market depth encouraging import replacement

Competitive capabilities secured in an economy as a result of the investment, with a high level of dynamic capability encouraging further investment in the economy

Thank you