# Parallel import and the grey market –

# Automobiles industry

By Prof. Elli Kraizberg, January 2019

## 1. Definition.

A parallel import is a non-counterfeit imported product from another country, without the permission of the owner of the intellectual rights - the importer who has obtained the exclusive rights from the manufacturer to market the product. Parallel import is often referred to as a grey market and is implicated in issues of international trade and finance, and intellectual properties.

### 1.1 Background.

In 2018, the Israeli car import market was a hefty 4.4 billion US$ market, cartelistic in nature with a limited number of authorized importers. Large scale parallel import of new automobiles was prohibited by law in Israel until 2013, as it was in the US and most European countries. Only a single official importer/ dealer, who owns the intellectual property rights, is allowed to sell new cars in a pre-designated territory. Offenders in the US market were persecuted and severely punished and so was the case in Israel. 2013 reform by the ministry of transportation in Israel allowed "indirect import" of automobiles, provided that the cars are purchased abroad from an official dealer. Few companies have started importing cars simultaneously with imports by the official agents.

In 2016-2017 the ministry of Finance (Custom Police unit) raided these companies, arresting the owners, and confiscated 100 cars that had just arrived to Haifa port, citing a technical ground such as "fictitious invoices" in lieu of the fact that the sellers abroad were not the car manufacturers, or authorized dealers. Obviously, the real reason stems from the fear of the ministry that a significant loss in tax revenue would take place, given that a prior 2010-legislated tax reform, reducing significantly duties on "green cars", dramatically reduced tax revenues. Taxes on automobiles in Israel is the highest in the OECD countries and tax revenue (including VAT) finances 2.5%-3.5% of the entire budget of the government.

### 1.2 The parties involved

The ministry of transportation. The ministry wishes to promote a reform that will increase competition in the automobiles market. The reform includes some restrictions on parallel import but imposes the responsibility to honor the new-car- warrantees on the official importers.

The ministry of finance. The ministry objects to the new reform, being concerned that it will adversely affect tax revenue.

The Supreme Court. In 2014 the supreme court in Israel (8848/12 , 7629/12) held that "parallel" import should be legalized since competitive markets improve consumer welfare, thus public interests supersede possession of intellectual rights owned by the official importers.

The official importers . The owners of intellectual rights by a legal contracts. Some of them have paid a significant sum of money to purchase the right to become the sole importer, and some invested money in promoting and marketing the brand that they import.

The parallel import companies. (PICs herein) Generally, companies that have been in the automobiles market prior to the emergence of this new opportunity to import new cars, though they have never owned the intellectual right.

**The consumers.** The purchasers of new cars are likely to benefit from parallel import since competition should reduce prices and make new cars more affordable, thereby reduce the likelihood of road accidents. It is also likely to increase the variety of automobiles.

## 2. Business environment

The following data will introduce several aspects of the business environment: the market environment, taxation/ and tax revenue and the legal environment.

### 2.1 The market for new cars

Based on data published by the Taxation Authorities in the Ministry of Finance[i], 203,727 private new vehicles (less than 12 months old) were imported to Israel in 2012, a 4.9% rate of growth over a 10 years period (See Table 1). Personal import, for own use, was negligible. Only 600 cars were imported in 2004, 3200 cars in 2009 and less than 1500 in 2017. Most of the privately imported cars were large luxurious cars (over 3000cc) such as Toyota Sienna, Mercedes and BMW. At that time no parallel import was allowed.

Imports, after the 2013 reform, from 2013 to 2018 is given in Table 2 and 3 [ii], indicating an average but inconsistent rate of growth of 4.5%. While prices of cars before taxes were stable between 2008 and 2012, import prices declined during the period 2013-2015 when average prices went down from $16,324in 2014 to $13,023 in 2015 and went up sharply to $16,168 in 2017 (54,621 to 52,842 and then 58,531 respectively in NIS) [iii].

The impact of the reform by the Ministry of Transpiration, allowing parallel import is reflected primarily in the variety of cars that were imported and a modest decline of 8% in the prices of cars imported by PICs[iv]. Nevertheless due to the investigation conducted by the Tax Authorities against major PICs, the number of imported cars by PICs went down from 25,000 in 2014 to almost zero in 2016, and 1117 cars in 2017. For comparison, in 2017, only 1616 cars were privately imported, while the total number of imported cars was 218,276 in 2017 and 267,070 in 2018.

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### 2.2 The structure of the market and its participants

There are 54 car manufacturers worldwide which export their cars abroad, and additional 100 manufactures for local use only**.** Toyota Corolla which was the top selling car (excluding pickups) with 1.2 million cars a year, lost its title in 2018 to Nissan Rogue [v]. Most of the manufactures utilize a network of authorized dealers in marketing their cars, who are limited to a certain territory, and in all cases are forbidden to sell cars abroad. This system has been developed in The US since the early 20th century, and is documented in numerous studies[vi]. The contract between the manufacturer and the dealers is often referred to as a cartelistic agreement, though it is anchored in The US law. In recent years US court have imposed over 30 million dollars fines on dealers who violated the agreement[vii]. Recently, the FBI has raided exporters of Mercedes and BMW cars to China who are trying to cash in on the huge difference between the prices of these cars in China and in The US. The Supreme Court, however, intervened in favor of these exporters.

The manufacturers prefer to sign official contracts with car importers worldwide, thereby able to protect their good will and dictate the standards. Simultaneously, barriers imposed on cars import, primarily in The US have led major world-wide manufactures to produce their cars in The US.

The grey market for cars, in which unauthorized parallel import takes place, is therefore very limited. PICs have difficulties obtaining a legal source of cars.

The Israeli Automobile market is not significantly different than that in the OECD markets since there exists a clear authorized dealership structure, cartelistic in nature. Graph 1 describes the structure of the market. The graph emphasizes that PICs must purchase cars from authorized dealers abroad but only through a third party.

### 2.3 Marketing characteristics of the industry

At the end of 2017 there were 3.2 million operating vehicles on the Israeli roads. The distribution of ownership is given in Table 4. However, sales of new cars every year are strongly biased in favor of the business sector. Since most business cars end up in the public hand as "second-hand cars" the distribution of ownership indicates that the vast majority of the cars are owned by the public. The rate of depreciation (private cars that their license was cancelled or revoked) is 81.1% (2017). That is to say, net increase in cars on the road is 1.3% per year.

Until 2005, 60% of new cars in Israel were purchased by business entities (not including rental cars companies). A tax reform that considered personal use of companies' cars as a taxable income, reduced this rate to 49% in 2012 (See Graph 4). Simultaneously, the market share of leasing companies for private use rose to 119% in 2012, while business leasing rose to 25% in 2012. All cars were purchased from official importers, designated by the original car manufacturers. A new trend, started in 2012-2014, primarily through leasing companies, was the sale to the public of "zero-mileage" new cars as "second-hand" cars, sharing the mark-up with the official importers.

Key marketing factors in this industry are: value in the used secondary market, safety equipment, fuel consumption, "green"/hybrid cars and taxes as a function of engine capacity. Data regarding the secondary used market for cars in given in Table 6 and Graph 3. Safety equipment is analyzed in Table 5. Trend in hybrid cars is shown in Graphs 5a and 5b and also discussed below in section 2.4. The data clearly indicates a stiff growth in luxury cars with high engine capacity, despite of the negative tax considerations (See section 2.4 below). This is partially attributed to the fact that PICs focus on this segment of the market (63% of PICs' import was with engines larger than 3000cc).



### 2.4 Automobiles taxation environment

Briefly discussing the tax code that is related to import of automobiles, it reveals the real motivation underlying the tax Authorities actions and explaining their fierce objection to PICs.

**2.4.1**. In 2008 a new reform has enacted, stating that that "use" of company's car will be treated as a taxable income. This reform is not directly related to import but it has dramatically changed the type of buyers of imported cars.

**2.4.2.** In 2010 the "green" cars reform was enacted, reducing the purchasing tax to as low as 30% from 89% at that time. Graphs 5 and 5a demonstrate a dramatic increase in "green" cars, which has led to a significant reduction in tax revenue. This loss of revenue forced the tax authorities to reduce the benefits in the 2017-amendment of the reform. The current formula is:

$$\text{Green Score} = \frac{119*CO2 + 88{,}461*NOx + 25{,}150*HC + 1{,}222*CO + 170{,}885*PM}{100}$$

Where CO2 and CO are Carbon dioxide and monoxide respectively, NOx is nitrogen oxides, HC is a smoke measure Hexachloroethane and PM breathing particles. Green score of 0-150 (hybrid) reduces the purchasing tax to 30%, while score of 221-250 reduces it by only 2184NIS (a purchasing tax rate of about 78%).

**2.4.3.** In 2013 a luxury-car tax was enacted, in addition to the 83% purchasing tax. The formula is:

*Luxury tax = min [0, 20% of 1 less (300,000/price of car)]*

That is to say, a 400,000NIS car would pay additional 5% tax.

**2.4.5**. MRSP vs invoice. International Trae Agreements call for computation of import taxes based on actual invoices and not based on MRSP (Manufacturer Suggested Retail Prices). Graph 2 indicates that the actual market price of new cars is well below MRSP. Perhaps, due to the pressure of the official importers who wanted to prevent personal import, or due to the wish of the tax authorities to maximize tax revenues, the import taxes for many years was computed based on the MRSP. Pressure from abroad, primarily from The US, has slightly changed this policy, so that PICs are taxes based on invoices. The invoices, however, must be originated by authorized dealers abroad. This is a critical point that has justified the raid of the Israeli Custom Police on the PICs in 2016, arresting key personnel of these companies.

Despite of the International Trade Agreements that call for mutually abolishment of tariffs, the Israeli Tax Authorities admits in writing that automobile import taxation is a major source of financing for the government budget (a policy that was common in the world in the 19th and early 20th centuries)[viii]. They write:

*"We believe that the preferred avenue is NOT transforming personal import into Parallel import, but simplifying the process for private citizens…. and protecting the **State's incomes**"*

*" …The claim that reducing air pollution supersedes fiscal considerations is farfetched and is due to some international pressures….."*

The tax Authorities goes further and reacted strongly against the reform by the Ministry of Transportation (see 2.5 below), allowing parallel imports:

*"The Tax Authorities is strongly apprehended by what seem to be easements on imports (parallel import – added) … and the potential harm they will bring on the State's incomes"…*

Table 1 and 2 summarize the total government tax revenues from car-imports from 2002 to 2018. The current effective tax rate on new imported private cars can reach 119% of the original car value, plus transportation costs (83% purchasing tax, 17% VAT and a minor tariff rate).



### 2.5 Transportation enacted reforms

In 2011 the Ministry of Transportation in Israel advanced a reform that would enable parallel imports of automobiles, under few conditions: (i) The vehicles will be purchased from an authorized dealer abroad, (2) The vehicles would be less than 12 months old from the date that it was manufactured, (iii) PICs would provide service and spare parts and supply warranty similar to the one provided by the official importers.

At a later date, realizing that the above conditions nullify the effect of this reform, the Ministry imposed the responsibility under the warranty, recalls and spare parts for all imported cars on the official importers even if the cars were not purchased from an official dealer abroad.

In 2015, the Minister of Transportation, referring to the objection of the Tax Authorities, declared the reform as being "irreversible".

### 2.6 The legal environment

In a decision by The Supreme Court in June of 2014 (8848/12 and 7629/12) the judges, Naor, Dantziger and Barak-Erez paved the way for a legalized parallel import. The decision was not concerned with the point of view of the Ministry of finance, that is, the State incomes. Rather, the issues that decision has dealt with was: does public welfare considerations supersede ownership of intellectual properties? On one hand, there is no doubt that parallel import is likely to improve public welfare, as competition pushes consumer prices down, increases variety of products and improve service, especially in lieu of the dependency of the small Israeli market on the international arena. On the other hand, the official importers have invested significant resources in developing their intellectual rights. Some of them have paid a large sum of money purchasing the exclusive right to import a certain type of cars, and subsequently have developed logistic capabilities and have invested money in developing a good will.

The judges are under the opinion that parallel import is not harmful to the official importers' intellectual properties, but if it is, public interest supersedes privately owned intellectual rights. The Judge Barak-Erez writes:

*"… This choice (public interests – added) is justified given the characteristics of the Israeli markets – in which the competitive conditions are limited, and considering the small size of the economy… The on-line trades via internet by individuals who live in Israel should signal to the official importers that they may not be the sole importers of a certain product" … The recognition of the legitimacy of parallel import is based on a judicial principle that states that the official importers exhaust their rights by being the first to sell the product…"*

In an earlier case (371/89 pp. 319-320) the presiding Judge that was also the head of The Supreme Court, M. Shamgar, stated that good-will belongs to the manufacturer and not to the marketer (importers) even if the latter invests resources in promoting the good-will.

One issue has remained an on-going open obstacle, still debatable in Courts: who are the permitted sellers abroad and what type of invoices are acceptable. The reform of the ministry of transportation, discussed in 2.5 above, states that the seller abroad must be the manufacturer or an authorized dealer, but as stated in 2.2 authorized dealers are not permitted to sell beyond their pre-designated territories. This put the PIC in a bind and that is why the Tax Authorities claimed that their invoices are fictitious. The above decision of The Supreme Court does not resolve this issue but states that there are two tests for the legitimacy of an invoice, one is the economic test and the second one is "a test of sponsorship". The economic test seeks rational motivation under the deal that is described by the invoice. That is to say, a deal in which the invoice is supplied by a third party is legitimate if the values in the invoice are compatible with market values.

The decision above determines that the second test requires that, citing, " *"…The parallel importer must prove that the use of the name of the manufacture does not convey to the consumers the impression that the manufacturer actually sponsors his activity.."*



## 3. The dilemma facing PICs

Seemingly, PICs face an impossible dilemma. On one hand, the 2013 transportation reform, backed by a decision of The Supreme Court, legalized parallel imports. On the other hand the automobiles market worldwide is bounded by cartelistic agreements which allow only official foreign importers to purchase cars. Thus, PICs in Israel can only buy cars if the purchasing documents are written on a third party, but then The Tax Authorities declare the invoices to be fictitious.

### 3.1 Penetrating the market

The necessary, but not sufficient, conditions that have to be met so that PICs can penetrate the market and establish long-term operations are:

--PICs must find sources of cars and pay a price that is significantly lower than the price paid by official importers.

--PICs must have logistic capability to import cars, transport the cars and store the cars, preferably using existing facilities.

--PICs must set an optimal level of Inventory.

--PICs must develop a marketing strategy, such as a unique market niche, thereby differentiating their activity from that of the official importers.

#### 3.1.1 Sources of cars

PICs may not purchase cars directly from authorized dealers, and therefore must find a third party who is allowed to purchase the cars abroad. This is a key factor so that PICs can reach a significant and profitable volume. One source, for example, is an authorized dealer in a third country who is not likely to be sued or prosecuted for violation of the agreement with the manufacturer. Alternatively, a major entity[ix] in this industry in The US offers a large quantity of new cars (less than 12 months old but some with non-zero mileage). These cars are surplus cars at the end of the selling season (July to October). Regardless of the source, the third party would require a hefty commission, primarily due to the risk undertaken for explicitly or implicitly violating prior agreements. It is believed that the third party premium can reach 7-10% of the selling price.

### 3.1.2 Pricing automobile sales

MRSP (Manufacturer Suggested Retail Price), as shown in Graph2, is well above the market price. The graph indicates potential discount for various avenues but also the costs associated with parallel import. PICs must consider costs of storage abroad, transportation to the port, transportation overseas ($1500-2500 per car), Insurance (2.5%) and customs handling ($200-300). Additionally, as mentioned in 3.1.1, the intermediary's commission of 7-10%. Comparing this cost structure to that of the official importers, PICs must pay for cars about 16% less than official importers in order to achieve a price-advantage of about 8%.

### 3.1.3 Logistic capabilities

The investment in logistics is immense, including real estate in prime locations (Show rooms). This investment may constitute a major barrier of entry for PICs**.** Thus, PICs must be entities who have already owned and utilized these capabilities. Natural candidates for being PICs, therefore, are car-leasing companies, car-rental companies, importers with existing prime show rooms for high-price-per-unit products (exclusive furniture), etc.

### 3.1.4 Optimal Inventory

After carefully studying the impact of a long delay of a car delivery to the end user, PICs must set a minimal level of inventory so that they minimize costs of financing. Normally, depending on the origin of the cars, delivery can take 3-6 weeks from date of order. Delays in delivery, as opposed to cars in inventory, is a common practice in this industry, especially on the part of small official importers (ones that import less than 1000 cars a year).

### 3.1.5 Market niche

The data clearly indicates that PICs in recent year have focused on the luxury cars niche. However, this niche justifies import of at most couple of thousands cars for all PICs. Thus, PICs must develop new strategies that would differentiate them from the official importers. Perhaps they should consider the niche of new cars (less than 12 months) with non-zero mileage for which abundant supply may exist with a discount of up to 40% below MRSP.



## 3.4 The demand curve for new automobiles

Penetration of the market requires a macro analysis as well. That is, PICs have to be aware of global market trends. In 2015, for example, the official importers expected the demand to grow and therefore increased their inventory, but as it turned out[x] they got stuck with unsold inventory which has subsequently led to price concessions that may have made it impossible for PICs to penetrate the market.

Basic analysis of market trends folds down to an analysis of the over-all demand curve for new automobiles. Specifically, estimation of the parameters that affect the demand curve. The basic relationship between quantity demanded and price (along the demand curve) implies the relationship between a change in NIS value of all sold cars as a function of a change in price, which can be decomposed into:

*[Expected change in $ value of cars abroad] + [Expected change in foreign exchange rate] + [Expected[xi] change in tax burden] + [Expected change in profit margin/commission due to the changes in the competitive and legal environment]*

On the other hand, shifts of the demand function for new cars, or shifts in equilibrium points, are expected to be related to the following parameters:

- Gross Domestic Product-GDP/Income, per capita, i.e. the average income per person. More accurately, the after-tax income per household.
- Gas prices for automobiles (primarily 95 octane)
- Number of entities on the supply side (Official importers and PICs).

- Difference between index of new cars to used cars (substitution effect, see Graph 3, and Tables 6 and 7)
- Technological innovations, in particular, safety equipment.

Based on the data from 2002 and 2016, the best (most significant) equation is:

*Shift of demand/equilibrium point = 0.0655 + 110% * (Change in GDP*)*

GDP* - Change in the difference between actual GDP and multi-years average.

From the data it follows that moves along the demand curve around the equilibrium point are characterized by a NIS elasticity of demand of about **-1.9** (after adjusting for the effect of the GDP on the location of demand curve). That is, the quantity demand is negatively affected by the price at a rate of 190%.

## 4. Issues to be resolved and suggested study (guidelines for students)

Follow the guidelines as stated below:

- Given the multitude of facts and details and the complexity of the case, read it carefully and mark on a separate piece of paper the main points, such as timeline of events, reactions of the various parties, etc.
- Start with an analysis of the over-all market trends. Substantiate your finding also with sources and data, not given in this document.
- Analyze the participants, their aims, priorities etc., and a potential changes in their goals.
- Given the overwhelming decision of the Supreme Court that consumers' welfare considerations supersede the right imbedded in ownership of intellectual properties, take the stand point of a PIC and analyze the situation as an external consultant, free of any conflict of interests and emotional biases.
- Try to resolve the issues such as (but not limited to) the following:

1. Identify existing companies with relative advantages who are likely to make an attempt to penetrate the market.
2. In lieu of the market constrains how a PIC can purchase automobiles worldwide?
3. How a PIC can comply with the regulations?
4. In lieu of (1 and 2) deep discount pricing of new automobiles as a necessary condition to penetrate the market.
5. Identify new market niches in which a PIC can prosper.
6. Why the current trend has led PICs to operate in the luxury car market?
7. What are the Implications of collaboration between PICs and the official importers?
8. How business relationships among all parties involved should be established and agreed upon so that the markets can function smoothly?
9. Conclude with a projection regarding the future of the parallel import automobiles industry. Substantiate your conjectures.

## References



[i] The Division of planning and Taxation, Ministry of Finance, 2012

[ii] The source: 2013-2016 – The Israeli Automobile union of importers and 2017-2018 as in (i) above. There is a slight gap between the two sources- one is based on number of cars that were taxed and paid and the other one is based on the number of cars that were licensed and actually sold. The gap may indicate a soft market is the number of cars sold is significantly smaller than the number of cars that were taxed (2014)

[iii] Source: The Israeli Central Bureau of Statistics

[iv] Source: Direct report by PIC in an interview to a local newspaper.
[v] https://www.globalcarsbrands.com/all-car-brands-list-and-logos
[vi] The Development of the Franchise Distribution System in the U.S. Automobile Industry , Thomas G. Marx *The Business History Review* Vol. 59, No. 3 (Autumn, 1985), pp. 465-474
[vii] Automotive News July 2014
[viii] The division of research and economics in the ministry of finance in Israel (2012 pp 27)

[ix] http://www.auctionexport.com/Cars-From-USA.html

[x] The Tax Authorities has revised downward the tax benefits for "green cars" which led to a lower demand
[xi] Consumers' behavior indicates that the critical variable is the **expected** changes in the tax code rather than the actual magnitude of the tax burden..

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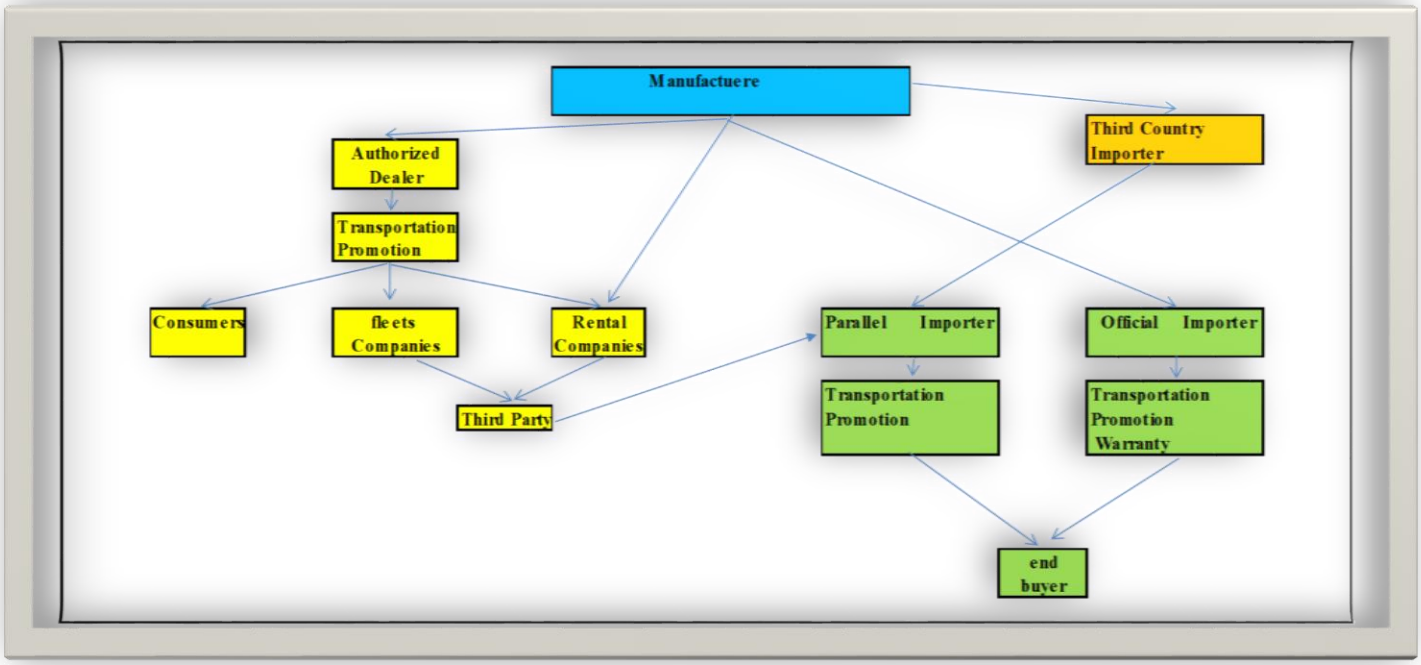
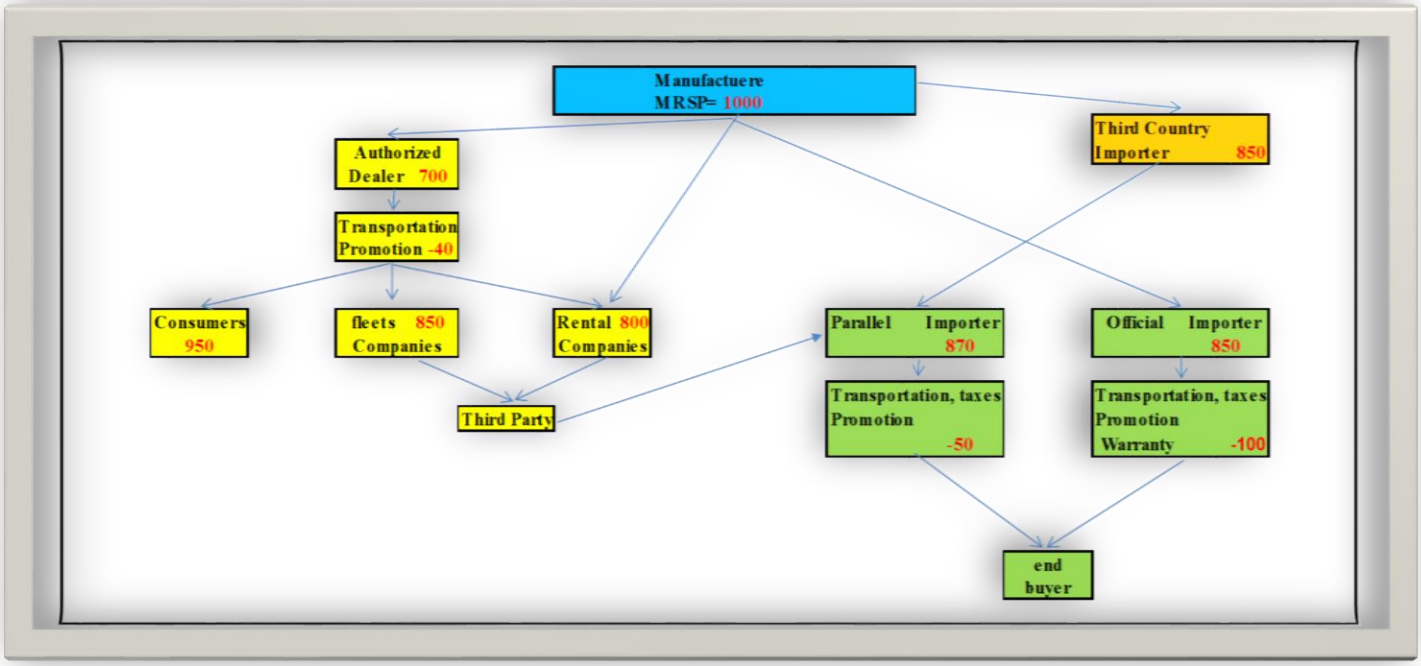
## List of Exhibits




**Graph 1**

**The structure of the internationl automobiles markets.**




**Graph 2**

**A hypothetical example of the pricing structure among all market participants when the initial price, MRSP, is 1000.**

| Total tax % of value | Total tax revenue | VAT (EST.) | Tariff | Purchasing tax | NIS value of import | # of cars imported | Year |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| 114.50% | 6335.5 | 1724 | 180 | 4,431 | 5,533 | 119,287 | 2002 |
| 113.35% | 6055.0 | 1656 | 197 | 4,202 | 5,342 | 109,911 | 2003 |
| 116.71% | 8229.2 | 2220 | 285 | 5,724 | 7,051 | 140,218 | 2004 |
| 120.93% | 8409.3 | 2232 | 297 | 5,880 | 6,954 | 136,939 | 2005 |
| 117.42% | 8532.7 | 2296 | 290 | 5,947 | 7,267 | 142,528 | 2006 |
| 113.81% | 10714.9 | 2925 | 382 | 7,408 | 9,415 | 185,171 | 2007 |
| 107.56% | 10206.8 | 2862 | 407 | 6,938 | 9,489 | 189,289 | 2008 |
| 103.23% | 9960.2 | 2849 | 391 | 6,720 | 9,649 | 172,459 | 2009 |
| 100.30% | 11820.9 | 3430 | 450 | 7,941 | 11,785 | 221,923 | 2010 |
| 95.01% | 11714.7 | 3494 | 413 | 7,808 | 12,330 | 229,944 | 2011 |
| 92.33% | 10492.9 | 3176 | 346 | 6,971 | 11,365 | 203,727 | 2012 |

**Table 1**

**Import of cars, tax revenue (in Mil NIS),**
**PRIOR to the reform**
**Source: Tax Authorities**

| Total tax % of value | Total tax revenue | VAT (EST.) | Tariff | Purchasing tax | NIS value of import | # of cars imported | Year |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| 89.91% | 10620.4 | 3259 | 316 | 7,045 | 11,812 | 225,297 | 2013 |
| 91.34% | 13476.9 | 4102 | 441 | 8,934 | 14,754 | 279,205 | 2014 |
| 94.10% | 11645.3 | 3490 | 369 | 7,786 | 12,376 | 229,972 | 2015 |
| 89.42% | 17889.1 | 5506 | 563 | 11,820 | 20,006 | 348,148 | 2016 |
| 89.75% | 11466.4 | 3522 | 323 | 7,621 | 12,776 | 218,276 | 2017 |
| 83.77% | 13691.1 | 4364 | | 9,327 | 16,344 | 267,070 | 2018 |
| | | | | | | | Also plus: |
| 101.46% | 728.7 | 210 | | 518 | 718 | 10,724 | commercial |
| 67.76% | 209.3 | 75 | | 134 | 309 | 38,542 | motorcycle |
| 18.61% | 534.6 | 495 | | 39 | 2,873 | 12,299 | trucks |
| 17.75% | 54.8 | 53 | | 2 | 309 | 3,985 | taxi |
| 40.85% | 897.7 | 450 | | 448 | 2197 | 120 | other |

**Table 2**

**Import of cars, tax revenue**

**(In Mil NIS), AFTER the reform.**

**Source: The Tax Authorities 2019**

| # of cars | Origin | Year | # of cars | Origin | Year | # of cars | Origin | Year | # of cars | Origin | Year | # of cars | Origin | Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 101,889 | Japan | 2017 | 104,101 | Japan | 2016 | 102,593 | Japan | 2015 | 95,627 | Japan | 2014 | 62,097 | Japan | 2013 |
| 72,444 | S Korea | | 77,155 | S Korea | | 64,953 | S Korea | | 57,741 | S Korea | | 50,751 | S Korea | |
| 88,102 | Europe | | 88,798 | Europe | | 66,962 | Europe | | 63,214 | Europe | | 80,448 | Europe | |
| 18,067 | USA | | 14,406 | USA | | 19,934 | USA | | 22,751 | USA | | 11,137 | USA | |
| 861 | Other | | 2,268 | Other | | 306 | Other | | 438 | Other | | 506 | Other | |
| **281,363** | **Total** | | **286,728** | **Total** | | **254,748** | **Total** | | **239,771** | **Total** | | **204,939** | **Total** | |

**Table 3**

**Licensed and sold cars by the origin of the cars**

**Source: Automobiles Importers Union.**

| E | D | C | B | A | | |
|---|---|---|---|---|---|---|
| Business/Goevernment/Non profit | | | | | | |
| Corporate Non-private | Rental companies | Leasing (portion of B) | Privately used | Private ownership | Total | Year |
| | | | | | | |
| 70,039 | 42,313 | 221,807 | 317,403 | 2,072,763 | 2,502,518 | 2010 |
| 2.80% | 1.70% | 8.90% | 12.70% | 82.80% | 100.00% | |
| 73,453 | 40,370 | 207,485 | 320,455 | 2,186,459 | 2,620,737 | 2011 |
| 2.80% | 1.50% | 7.90% | 12.20% | 83.40% | 100.00% | |
| 69,181 | 37,399 | 223,023 | 315,610 | 2,262,561 | 2,684,751 | 2012 |
| 2.60% | 1.40% | 8.30% | 11.80% | 84.30% | 100.00% | |
| 69,314 | 38,950 | 209,955 | 313,553 | 2,352,548 | 2,774,365 | 2013 |
| 2.50% | 1.40% | 7.60% | 11.30% | 84.80% | 100.00% | |
| 76,549 | 37,938 | 213,915 | 312,751 | 2,457,019 | 2,884,257 | 2014 |
| 2.70% | 1.30% | 7.40% | 10.80% | 85.20% | 100.00% | |
| 71,008 | 35,435 | 219,017 | 299,425 | 2,578,722 | 2,984,590 | 2015 |
| 2.40% | 1.20% | 7.30% | 10.00% | 86.40% | 100.00% | |
| 72,143 | 33,742 | 219,746 | 306,653 | 2,706,348 | 3,118,886 | 2016 |
| 2.30% | 1.10% | 7.00% | 9.80% | 86.80% | 100.00% | |
| 78,129 | 33,803 | 240,201 | 307,663 | 2,817,288 | 3,236,883 | 2017 |
| 2.40% | 1.00% | 7.40% | 9.50% | 87.00% | 100.00% | |

**Table 4**

**Distribution of ownership and use of new cars**

**Source: Tax Authorities**

| 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | Level safety equipment |
|---|---|---|---|---|---|---|
| 7.10% | 7.50% | 8.00% | 7.00% | 10.20% | 11.80% | 0 |
| 7.70% | 30.50% | **63.20%** | **80.60%** | **88.60%** | **87.50%** | 1 |
| 0.90% | 3.80% | 2.40% | 0.50% | 0.60% | 0.40% | 2 |
| 5.20% | 2.00% | 1.80% | 1.40% | 0.30% | 0.20% | 3 |
| 2.90% | 3.70% | 1.80% | 0.30% | 0.20% | 0.10% | 4 |
| 33.80% | 5.90% | **14.80%** | 8.40% | 0.10% | 0.00% | 5 |
| **37.10%** | **45.60%** | 7.80% | 1.60% | 0.10% | 0.00% | 6 |
| 5.10% | 0.90% | 0.30% | 0.10% | 0.00% | 0.00% | 7 |
| 0.20% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 8 |

**Table 5**

**Distribution of levels of safety equipment**

**Level 1 – airbags only, while 8 is the highest level**

**Source: Ministry of Transportation**

| Realtive real change in used cars | Relative change in used vs new | Relative real change in new cars | Used cars Price Index | New cars Price Index | Consumer Price Index CPI | Years |
|---|---|---|---|---|---|---|
| | | | | | | |
| -5.30% | -2.10% | -3.20% | 97.1 | 99.3 | 102.5 | 2008 |
| -11.10% | -7.40% | -4.00% | 94.2 | 101.7 | 105.9 | 2009 |
| -10.40% | -5.70% | -4.90% | 97.5 | 103.4 | 108.8 | 2010 |
| -15.20% | -7.70% | -8.20% | 95.4 | 103.3 | 112.6 | 2011 |
| -21.50% | -13.20% | -9.50% | 89.9 | 103.6 | 114.5 | 2012 |
| -23.30% | -15.20% | -9.50% | 88.5 | 104.4 | 115.4 | 2013 |
| -24.30% | -16.00% | -9.90% | 88.4 | 105.2 | 116.8 | 2014 |
| -25.20% | -17.80% | -9.00% | 86.8 | 105.6 | 116 | 2015 |
| -29.50% | -22.60% | -8.90% | 81.3 | 105.1 | 115.4 | 2016 |
| -31.50% | -24.60% | -9.20% | 79.2 | 105.1 | 115.7 | 2017 |
| -33.70% | -26.60% | -9.70% | 77 | 104.9 | 116.2 | 2018 7 mons |

**Table 6**

**Price behavior of new and used cars**

**Source: The Central Bureau of Statistics**

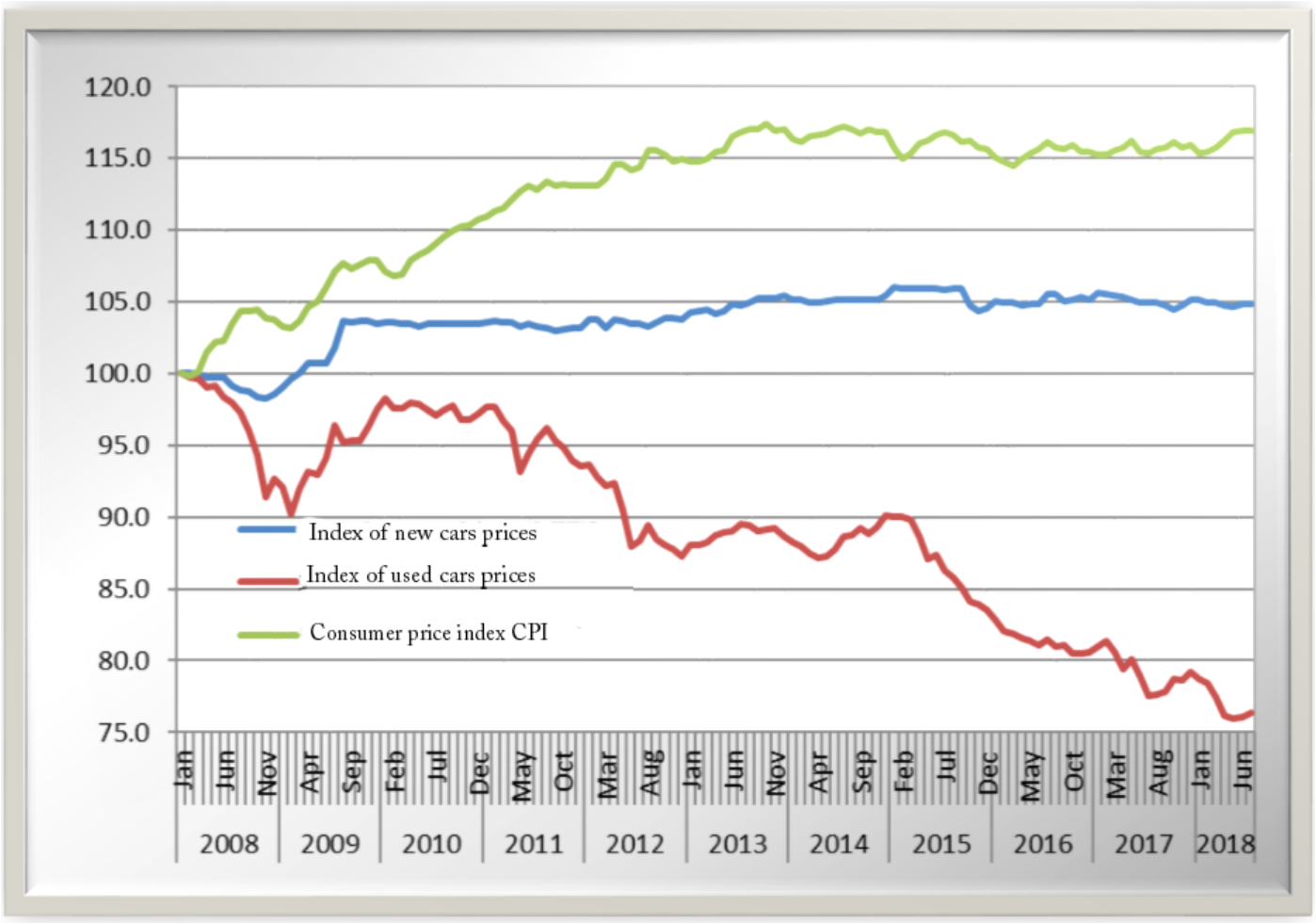
| 2014 | | 2015 | | 2016 | | 2017 | | |
|---|---|---|---|---|---|---|---|---|
| % of total | Number sold | % of total | Number sold | % of total | Number sold | % of total | Number sold | |
| 0.20% | 924 | 0.10% | 789 | 0.20% | 975 | 0.20% | 1,526 | Personal import |
| 22.30% | 117,960 | 22.70% | 126,488 | 24.10% | 143,452 | 22.60% | 140,459 | New Cars |
| 8.40% | 44,245 | 8.70% | 48,301 | 9.70% | 58,004 | 10.30% | 63,977 | Used car 1-3 years |
| 22.70% | 120,118 | 23.40% | 130,233 | 22.10% | 131,626 | 22.40% | 139,128 | Used car 3-6 years |
| 16.70% | 88,175 | 17.10% | 95,141 | 18.10% | 108,164 | 18.70% | 116,211 | Used car 7-10 years |
| 17.30% | 91,705 | 15.90% | 88,408 | 14.30% | 85,331 | 15.10% | 93,825 | Used car 11-15 years |
| 12.50% | 66,264 | 12.10% | 67,580 | 11.50% | 68,569 | 10.50% | 65,190 | Used car 15+ years |
| | 529,391 | | 556,940 | | 596,121 | | 620,316 | Total sales |

**Table 7**

**Cars sold to private individuals by**

**Age group of the cars**

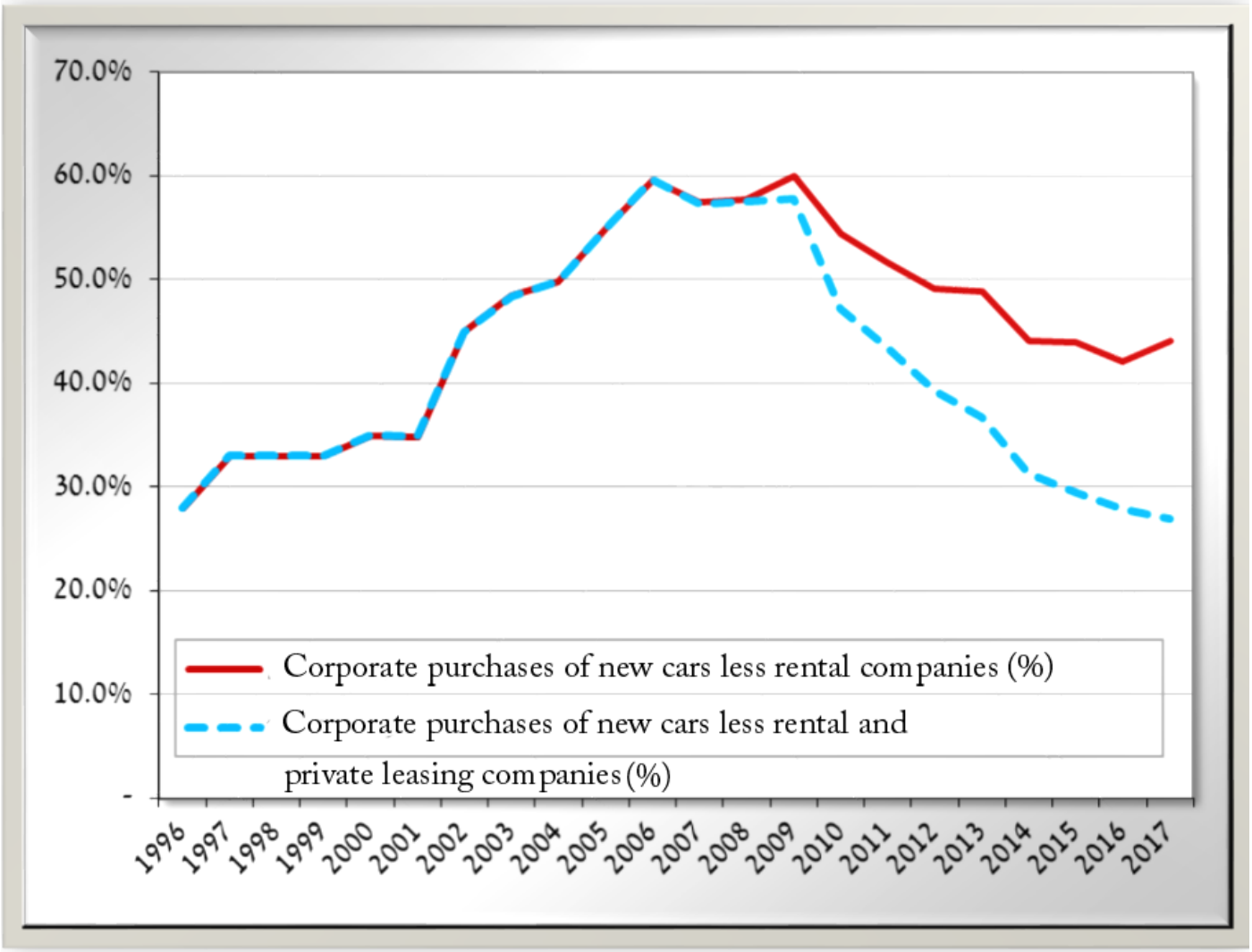
**Source: Ministry of Transportation**




**Graph 3**

**Indices of automobiles prices**

**Source: The Central bureau of Statistics**

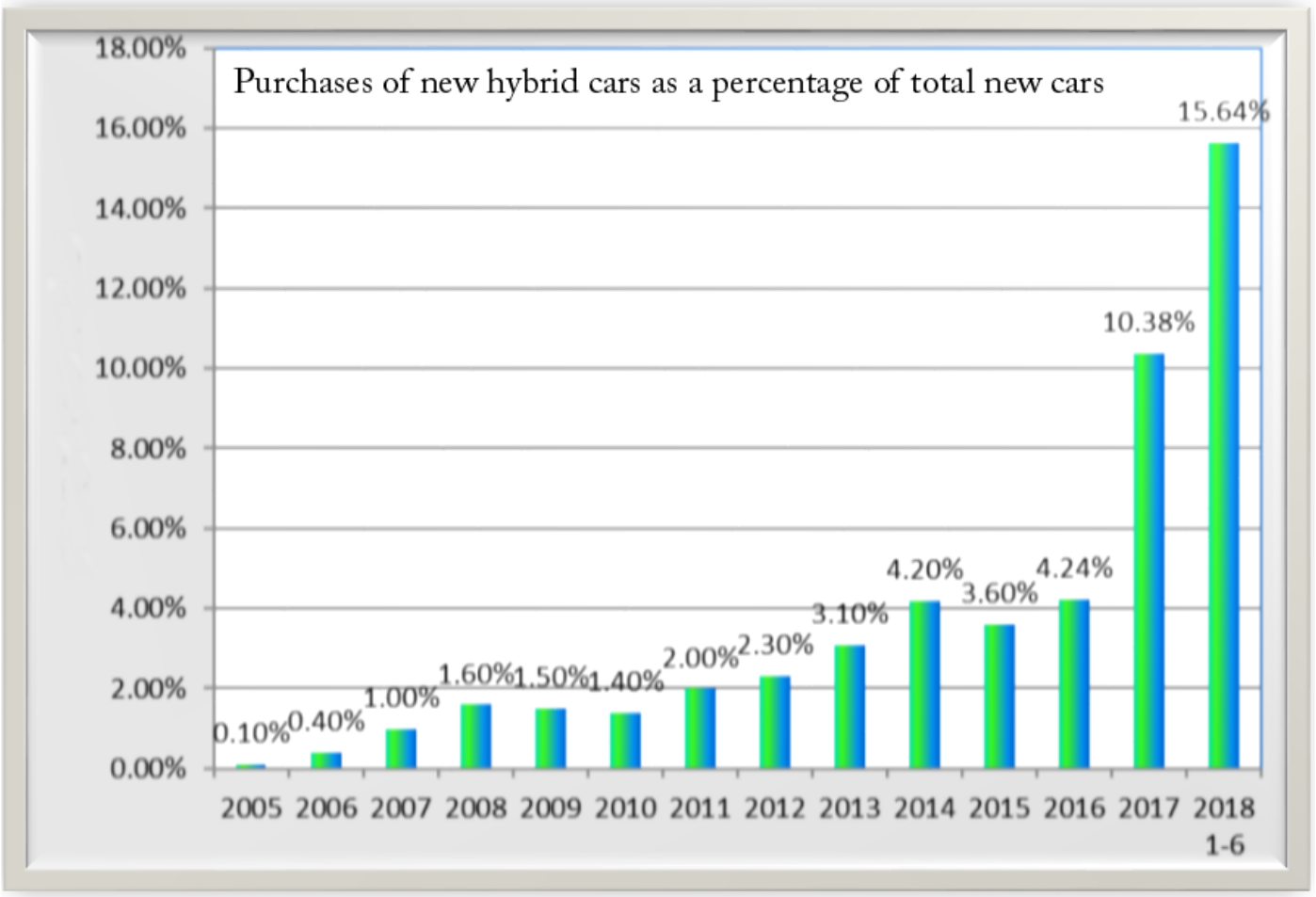



**Graph 4**

**Fraction of all new imported cars sold to corporate**

**Buyers, not including rental companies**

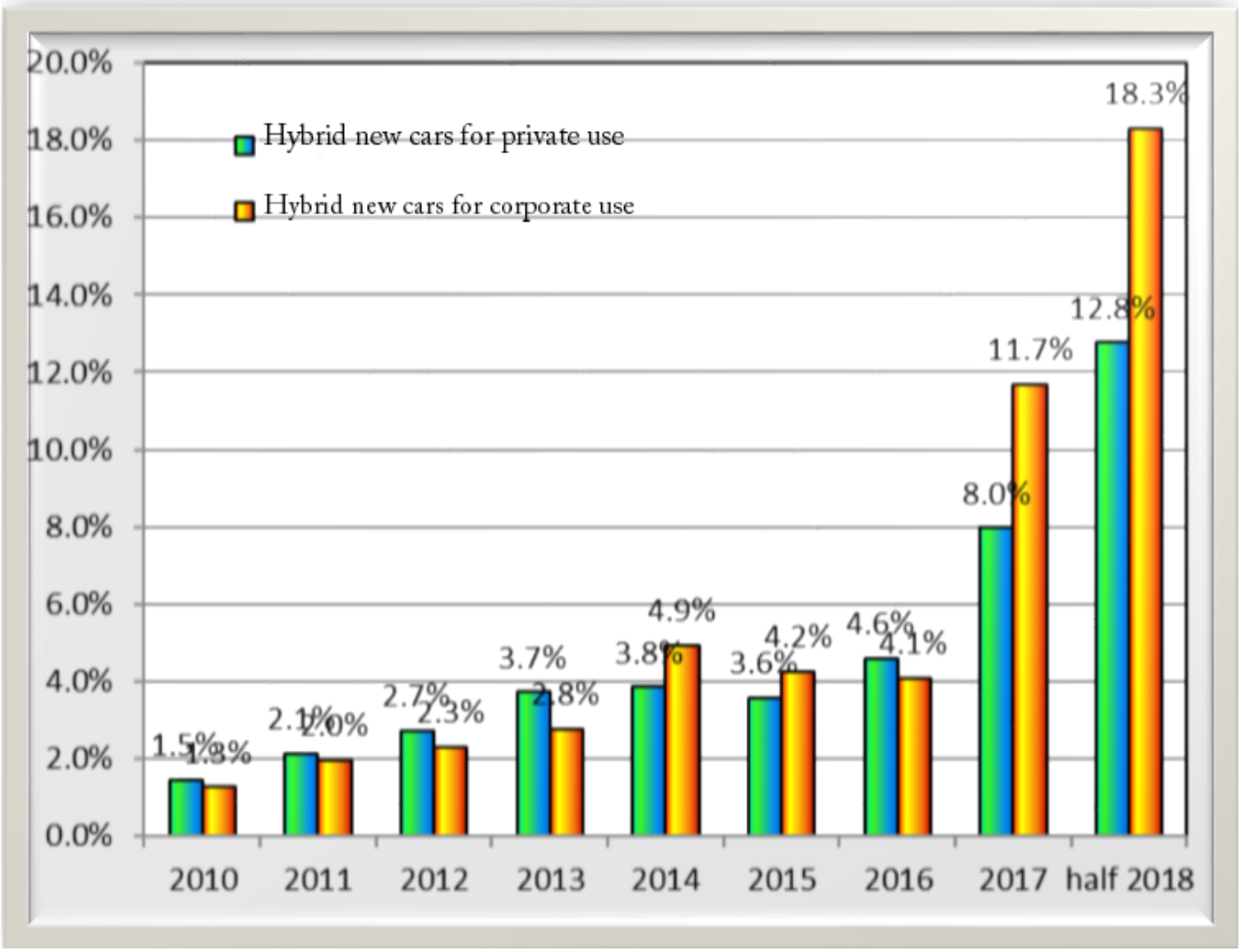
**Source: Tax Authorities**




**Graph 5**

**Purchases of new hybrid cars as a percentage of total new cars sold.**

**Source: Ministry of Transportation**




**Graph 5a**

**Purchases of new hybrid cars by users**

**Source: Ministry of Transportation**