



**Asia-Pacific
Economic Cooperation**

2016/AD1/018
Agenda Item: 4.1.4

APEC Motor Vehicle Related Taxation - Updated Comparative Analysis and Findings

Purpose: Information
Submitted by: United States



24th Automotive Dialogue
Manila, Philippines
25-27 May 2016

APEC Motor Vehicle Related Taxation

UPDATED Comparative Analysis and
Findings

APEC Automotive Dialogue
Manila, Philippines
May 26, 2016



APEC AD Manila (2015)

1. Reviewed and updated the draft compendium of motor vehicle taxes in the APEC region for completeness and accuracy.
2. Compared the different motor vehicle tax structures (Purchase, Possession, Use and Border), including incentives.
3. Agreed that each year this information on motor vehicle taxes and incentives is updated on a voluntary process.

APEC Auto Tax Information

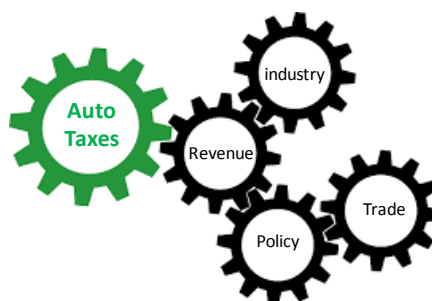
- With the help of many economies present here, and with publicly available information, we collected detailed auto tax data on 20 APEC economies + India
- We expect that most information we have collected is accurate and current, but that it will need to be periodically updated.
- We are confident that the overall results that follow are accurate.

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APEC Auto Tax Importance

Tax policy, the sovereign right of governments:

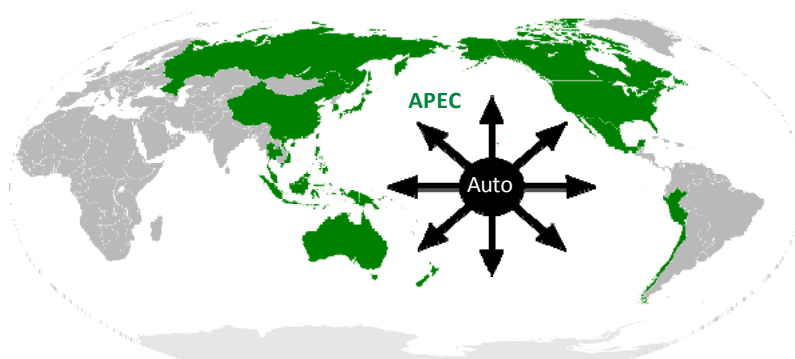
- Is often used to:
 - Collect revenue, &
 - Achieve domestic policy objectives
- It also influences:
 - International trade
 - Market size & behavior
 - Growth & health of industry



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Auto Taxes Growth & Competitiveness

- Tax policy can augment economic growth and industry competitiveness.
- The auto industry has one of the largest economic and job multipliers, and many economies are eager to attract auto industry investment.
- The right tax policy can help attract auto investment and growth.
- It can also play a key role in maintaining a globally competitive industry.



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Categories of Auto Taxes

Four basic auto tax categories were identified:

- 1. Border** (Paid upon the import of the vehicle)
 - Most commonly the import tariff.
- 2. Purchase** (Paid at the point of purchase)
 - Most commonly, Value Added Tax (VAT) and General Sales Tax (GST), but also indirect Excise Taxes.
- 3. Possession** (Paid over the life of the motor vehicle)
 - Most commonly an annual registration tax.
- 4. Use** (Paid during the use of the vehicle)
 - Most commonly a fuel tax per liter of gasoline or diesel.

And there are also important **tax incentives** used in the automotive sector- primarily to promote energy efficiency (not thoroughly covered in the following analysis).

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Tax Comparison Variables

4 New Car/Sedans <10 seats and 1 New Pickup Truck

(5 generic examples)

WHOLESALE/IMPORT (Customs Value)
RETAIL (Consumer/Purchase Price)
ENGINE SIZE/TYPE (Displacement/ Gas or Diesel)
NUMBER OF PISTONS (4 cylinders)
FUEL TYPE (Gasoline/Diesel)
ENGINE POWER: (Horse Power)
TRANSMISSION: (Automatic/2x4)
VEHICLE WEIGHT (kg)
FUEL EFFICIENCY (per 100km)
FUEL EFFICIENCY (per km)
NON-TAX PRICE (Gasoline/liter)
FUEL TYPE/MEASUREMENT: (Gasoline Unleaded/Liter)
DISTANCE TRAVELED ANNUALLY (15,000km)
LITERS CONSUMED (per 15,000 km)
ANNUAL NON TAX (Cost of Gasoline)
AIR CONDITIONING (Yes/No)

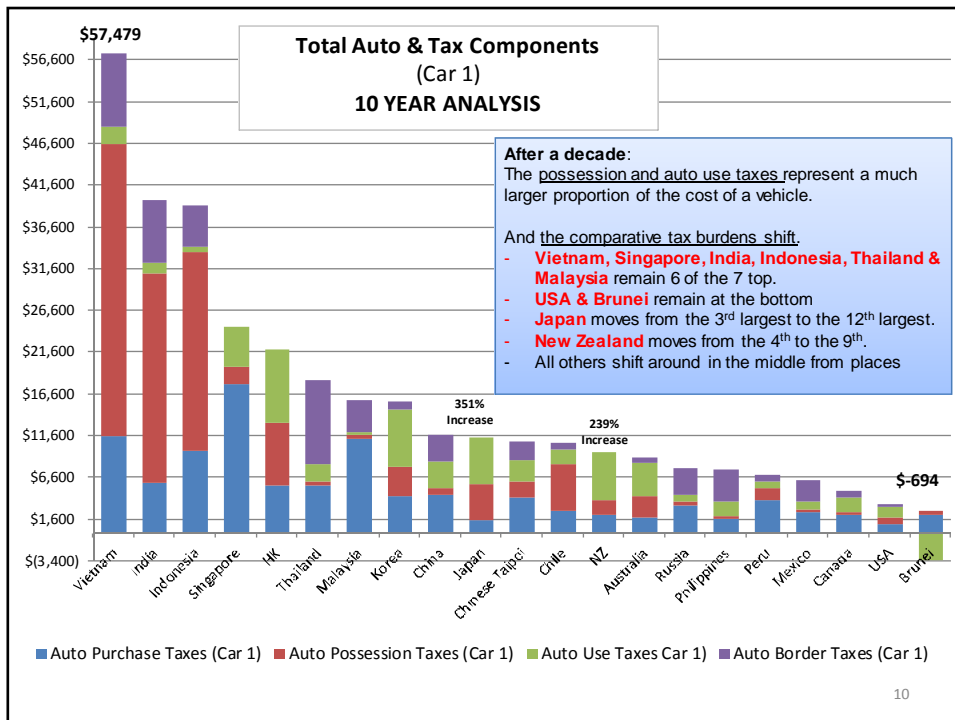
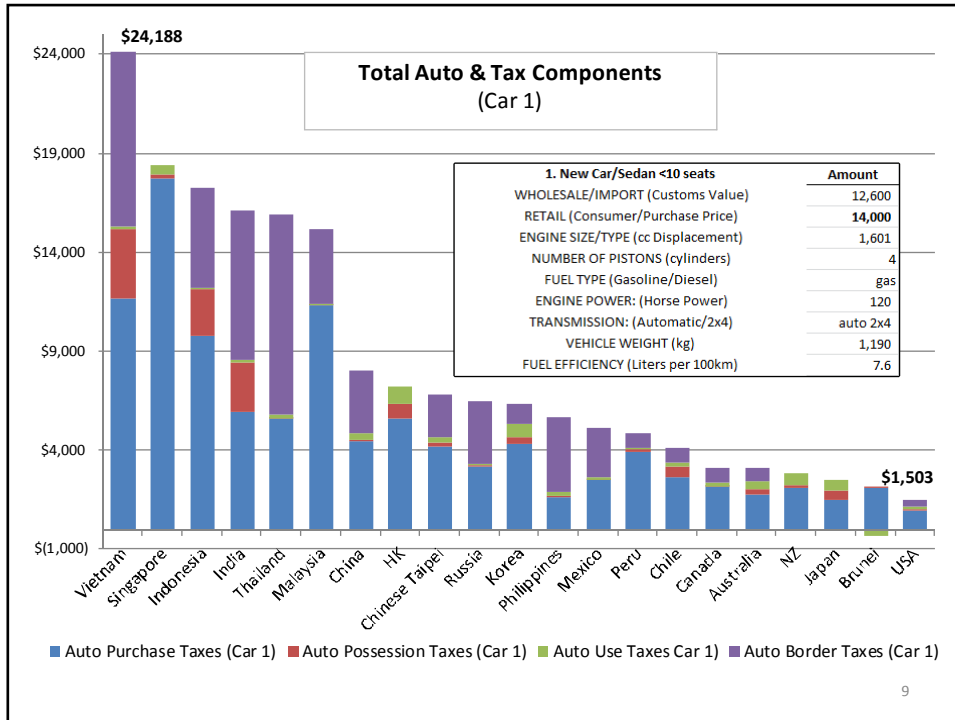
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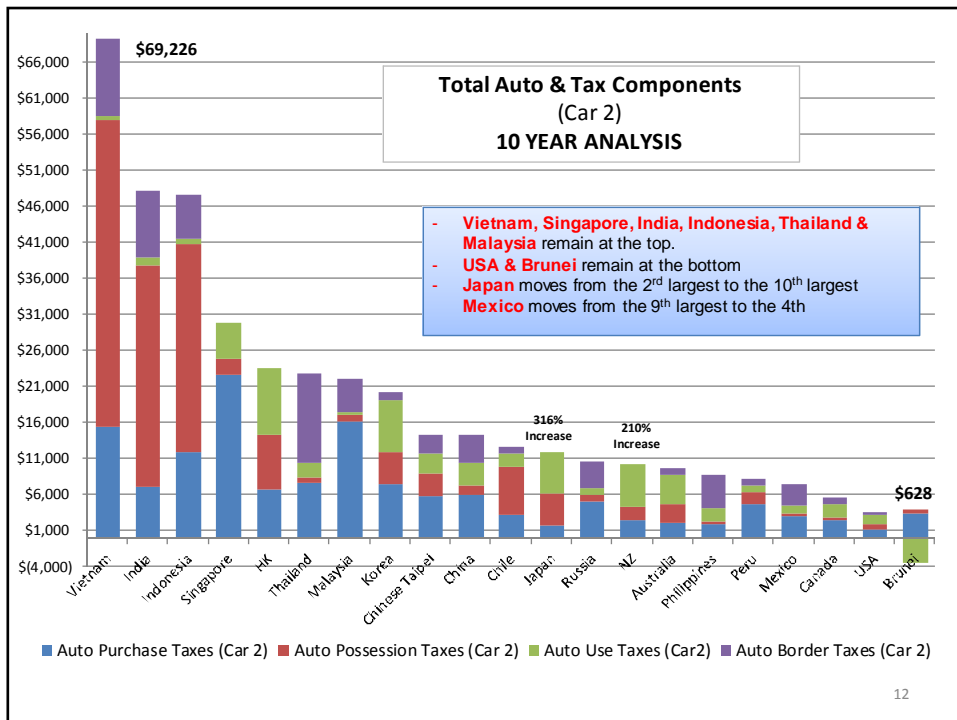
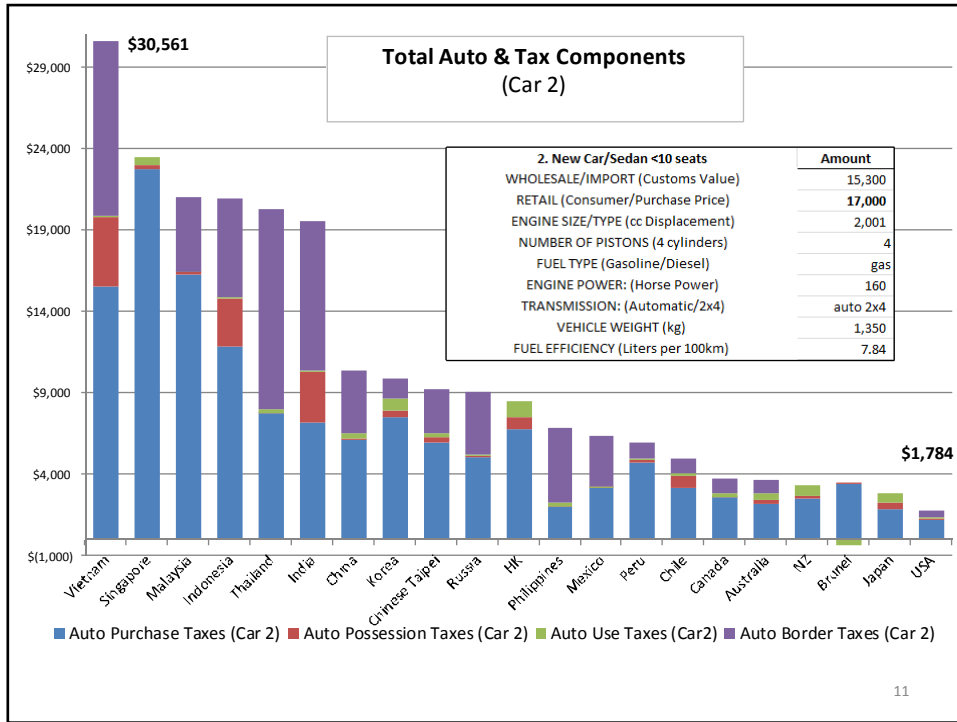
Tax Analysis: Assumptions

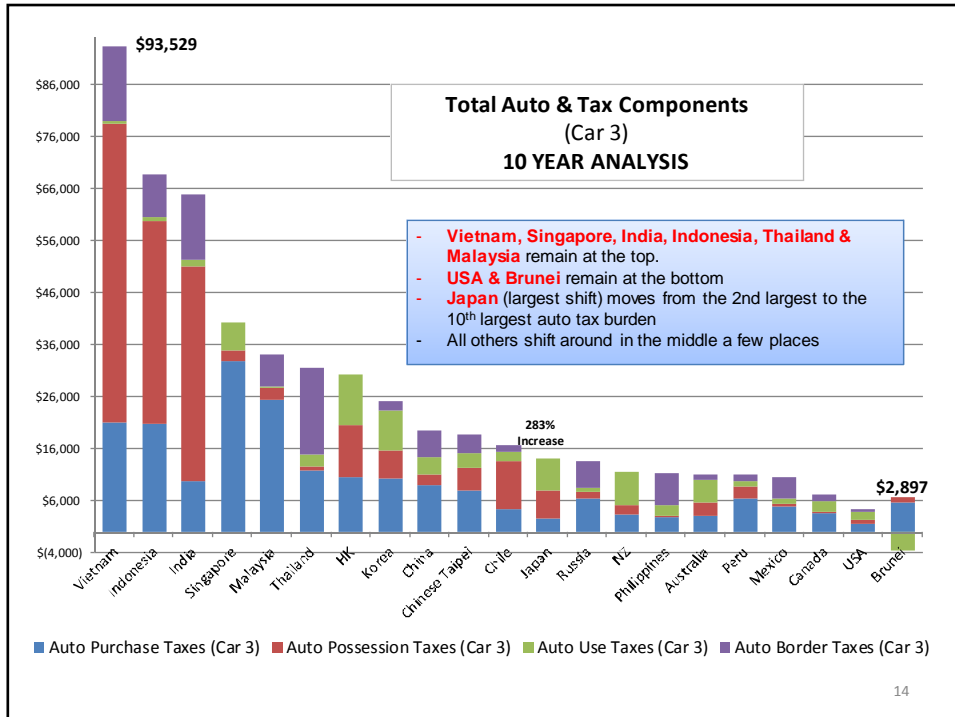
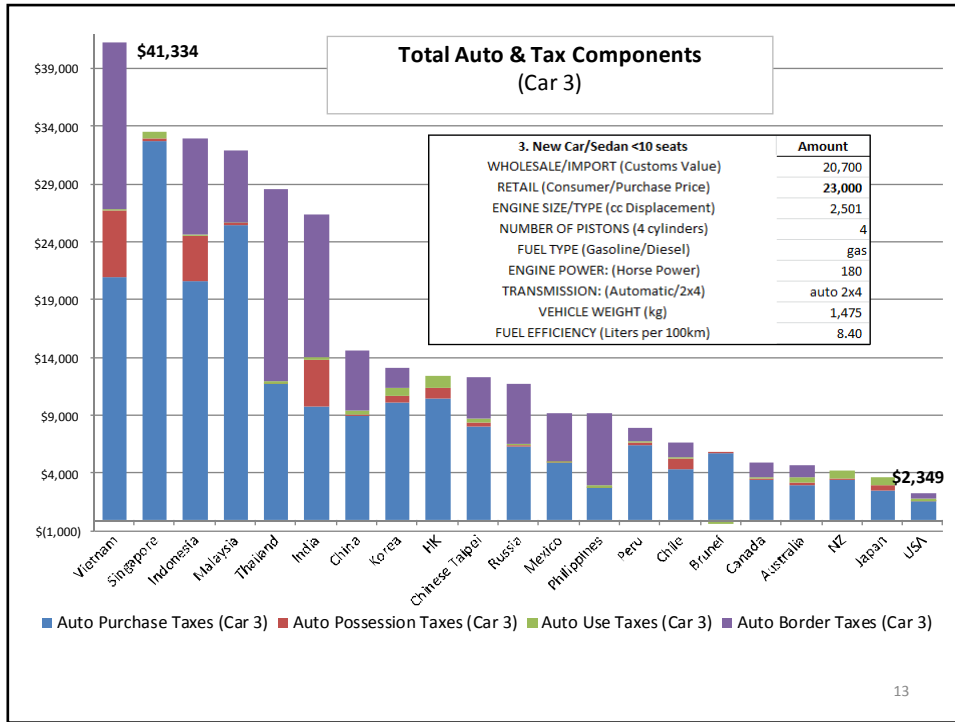
This analysis shows generic examples of vehicle configurations with several assumptions and omissions to make equal comparisons possible:

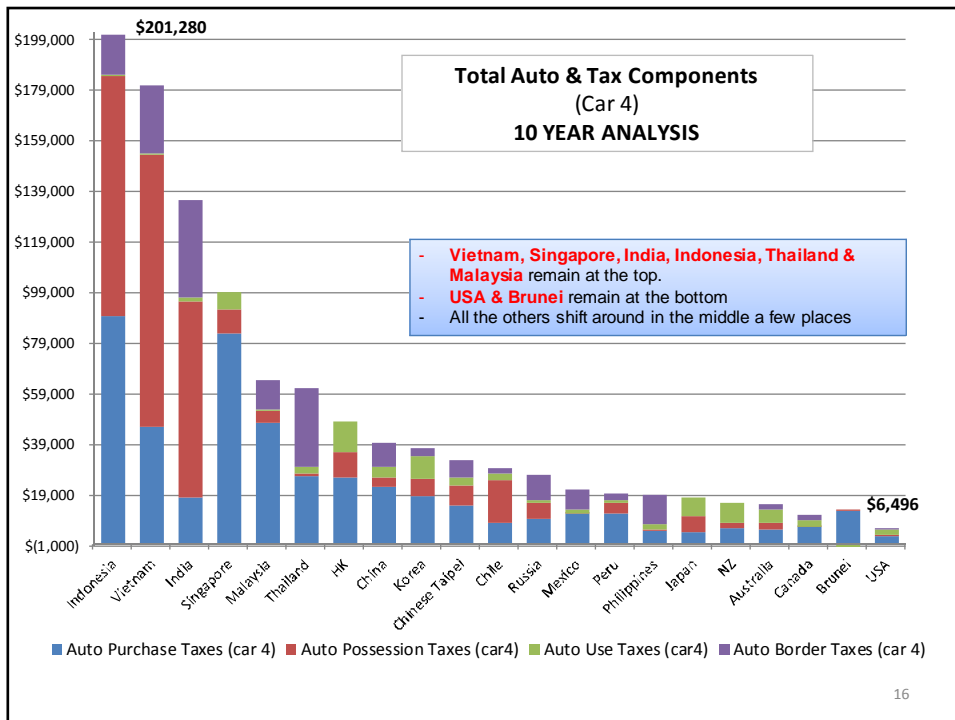
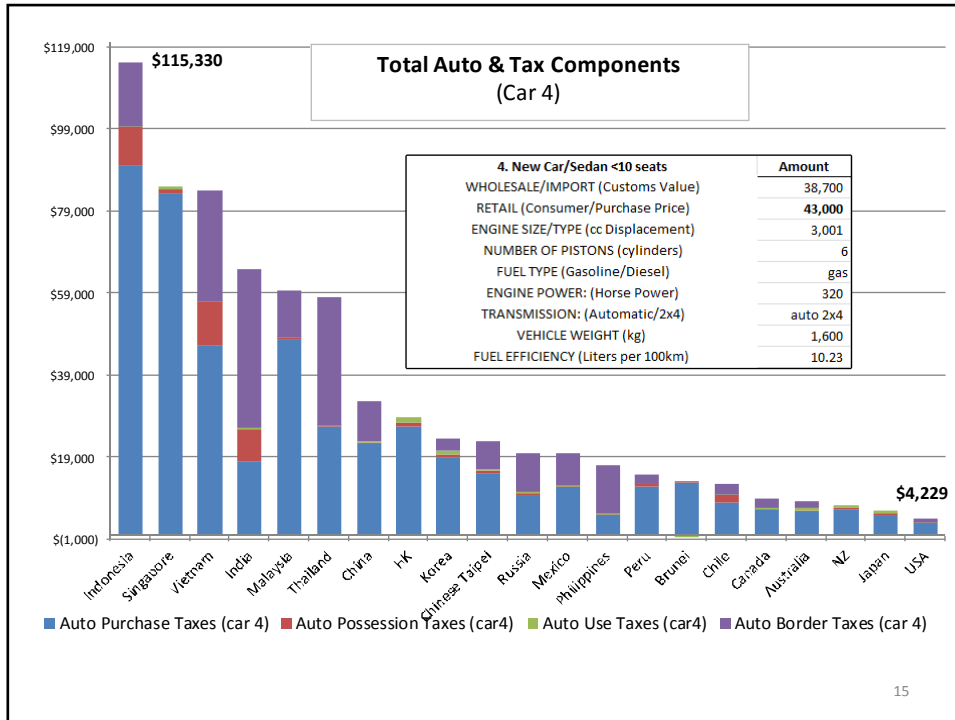
- **It assumes:**
 - For a retail price, a 10% markup from the import or wholesale price;
 - Vehicles with automatic transmissions, 2x4 drive;
 - The use of regular unleaded gasoline;
 - The cost of driving the vehicle 1-year (15k per year);
 - That the price of pre-tax gasoline is the international spot market **March 2015-June 2016**;
 - The exchange to the US dollar is the average between **Nov-April 2016**.
- **It omits:**
 - Preferential tariff arrangements (Free Trade Agreements);
 - Special treatment of CKDs;
 - Off the book special arrangements; and
 - Tax incentives for green technologies.

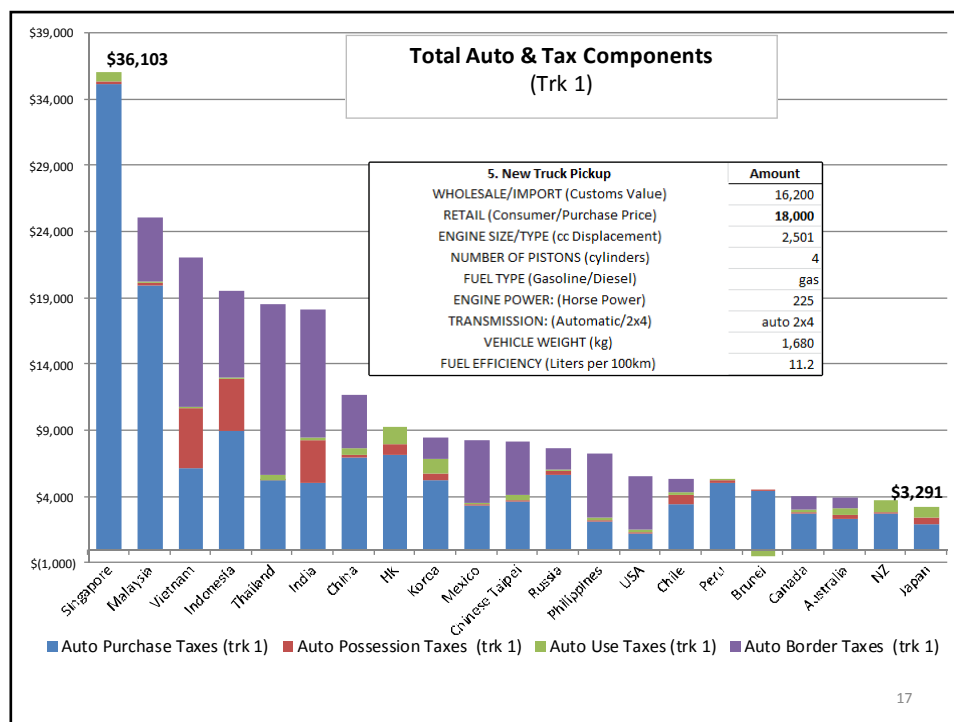
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APEC Auto Tax Findings

Biggest Contributors

Auto taxes are as diverse as the economies involved, but there are some obvious similarities and patterns that emerge.

- Regardless of the vehicle characteristics the two biggest contributors to the differences in the 20 economies' total auto taxes are **Purchase** and **Border taxes**.
- **Possession** taxes for the first year are minimal in comparison. But over the life of the vehicle can be quite significant- as the 10-year analysis demonstrates.
- Taxes (or subsidies) **on Use** (fuel cost for 1 year) also has little impact on the overall tax burden.

APEC Auto Tax Findings

Domestic vs. Import

Border taxes, which vary widely- from 0% to 80% within the APEC region (India is 100% for Car 4), represent the biggest difference between import and domestic prices.

- Of the 21 economies analyzed:
 - **5 have 0% import duties on Passenger Cars** (Brunei, Hong Kong, NZ, Japan and Singapore).
 - **8 have import duties ranging from 2.5-20%** (Australia, Canada, Chile, Chinese Taipei, Korea, Mexico, Peru, and the USA).
 - **8 have import duties between 25%-100%** on passenger cars (China, Indonesia, Malaysia, Philippines, Thailand, Russia, Vietnam, and India).

In some economies, there are significant tax benefits (rebates and/or reductions) provided to domestic manufacturers, or for local content.

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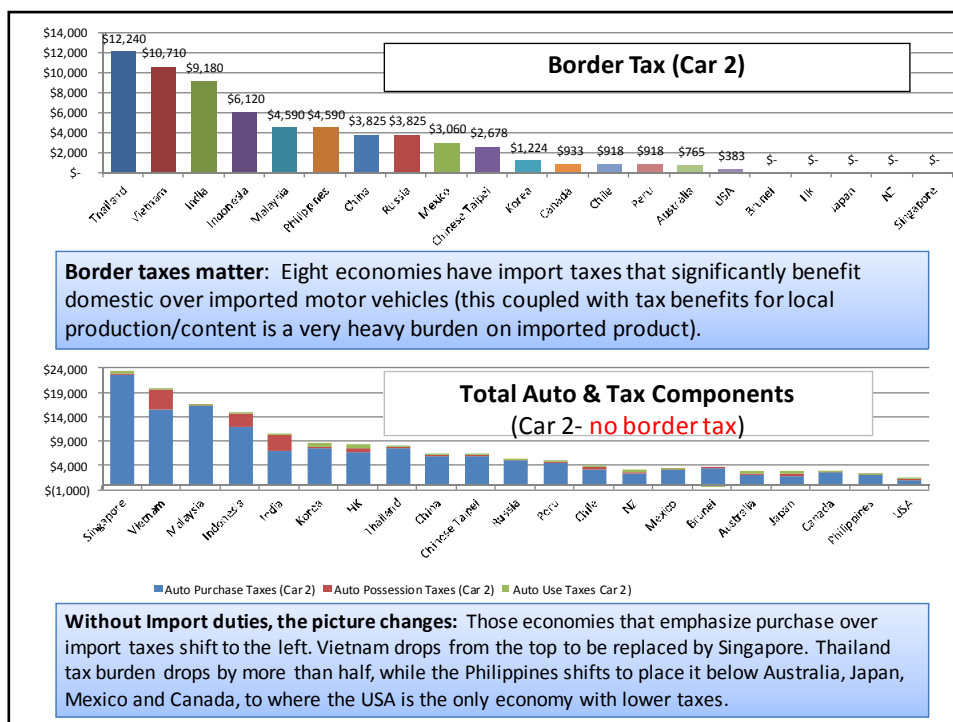
APEC Auto Tax Findings

10-Year Analysis

After a decade:

- The **possession** and **auto use** taxes represent a much larger proportion of the cost of a vehicle.
- And the comparative tax burdens of shift among economies.
- On average there is a 70-90% increase in the total tax burden, however, some are much larger.
- Japan's tax burden increases the most - more than 3x over a decade. Under the Car 1 scenario, Japan moves from the 2nd largest to the 10th largest burden.
- Vietnam, Singapore, India, Indonesia, Thailand & Malaysia start at the top and remain at the top.
- USA & Brunei start at the bottom and remain at the bottom
- The other economies shift a few (1-4) places.

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APEC Auto Tax Findings

Auto Tax Groups

APEC economies tend to breakdown into three categories- High, medium and lower auto tax burdens:

- **Top third tax group** includes (Singapore, Vietnam, Malaysia, Indonesia, and Thailand).
- **Middle third tax group** includes (China, Hong Kong, Chinese Taipei, Korea, Philippines, Russia, Mexico)
- **Lower third tax group** includes (Peru, Chile, Canada, New Zealand, Australia, Japan, Brunei and the USA)

APEC Auto Tax Findings

Tax Groups (Top)

What are commonalities in the top third?

The economies with the higher auto taxes (Singapore aside) have relatively higher **import duties** and **excise taxes** on cars with larger engines.

- **Thailand** has a **80% import duty**, and an **excise tax, ranging from 30-50%**, that significantly favors pickup trucks and cars with smaller engines over cars with larger engines.
- **Indonesia** has a **40% import duty**, with a large **luxury sales tax topping out at 75%** and also applies a high **excise tax on ranging from 10-125%** based on engine size.
- **Malaysia** has a **30% import duty**, coupled with a **excise tax that ranges from 65-105%**.
- **Vietnam** has a **70% import duty**, and a **consumption/excise tax ranging from 45-60%**.

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APEC Auto Tax Findings

Tax Groups (Low)

What are commonalities in the lower third?

The **lower third tax group** includes (Peru, Chile, Canada, New Zealand, Australia, Japan, Brunei and the USA)

- **Comprised mostly of developed economies**
- **Total taxes, are US\$9,000 or less** on car examples (excluding the luxury car)
- **Import duties are at 6.1% or less**, on passenger cars, with three economies with zero tariffs (Brunei, Japan and New Zealand).
- **Purchase taxes are not based on engine displacement** (except for Brunei).

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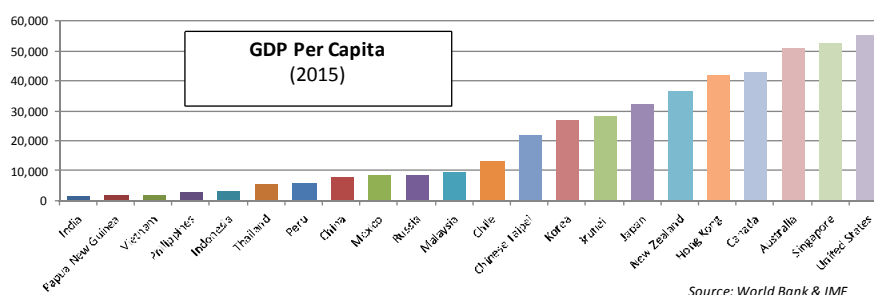
APEC Auto Tax Findings

Development & Revenue

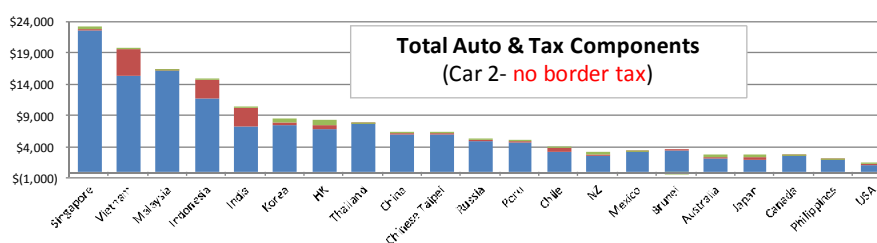
Auto tax burden/revenue levels vary considerably across APEC economies

- Revenue sources tend to reflect different stages of economic development.
- Developing economies tend to source auto tax revenue from higher **border taxes** and **purchase taxes** compared to developed economies.
- In contrast, **use taxes** (fuel taxes) appear to have no relationship to level of development.

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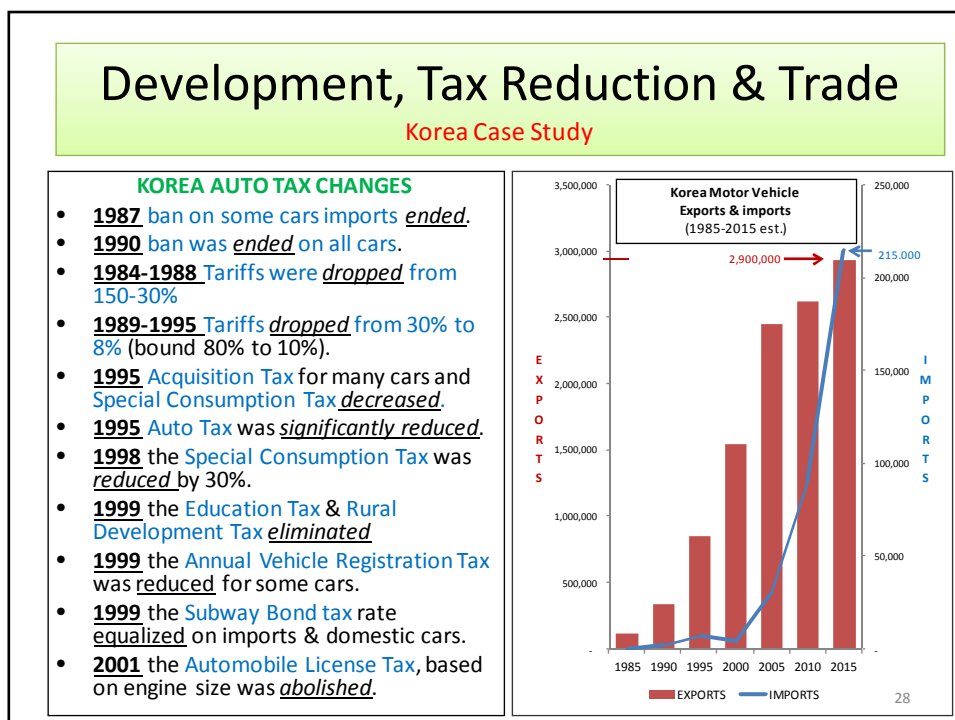
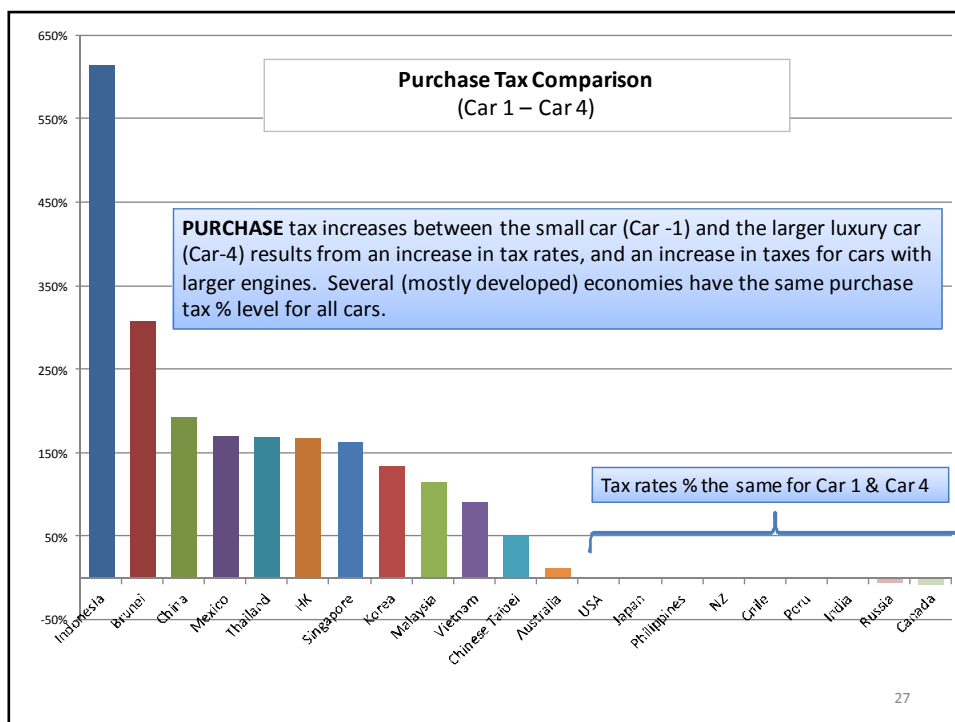


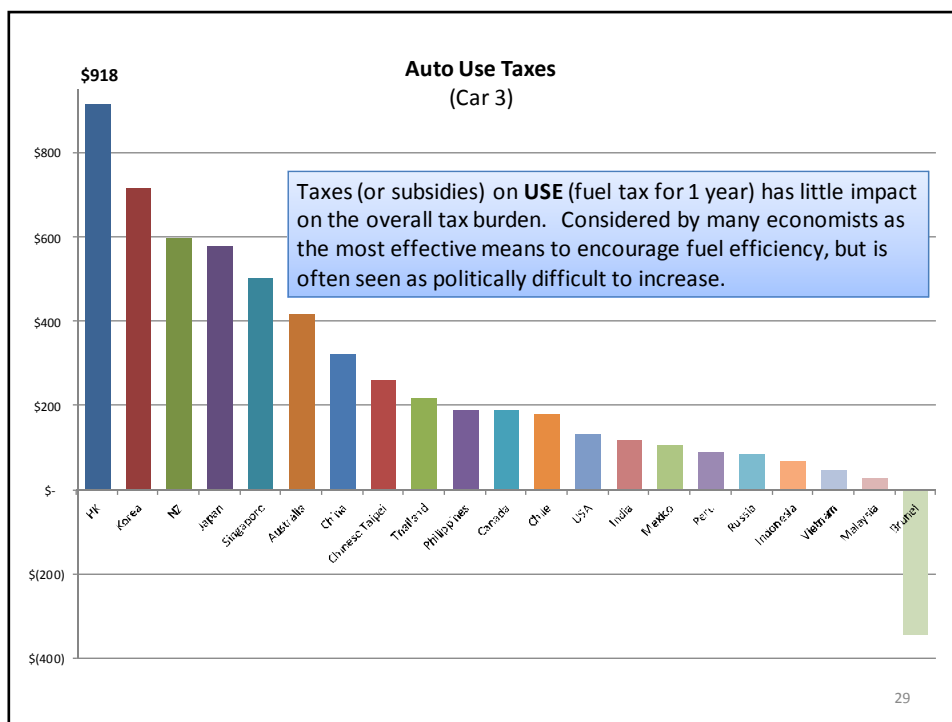
Source: World Bank & IMF



Development and tax revenue connection. There appears to be a strong connection between economic development and auto tax burden/revenue. Exceptions to the rule are Singapore, Peru and the Philippines.

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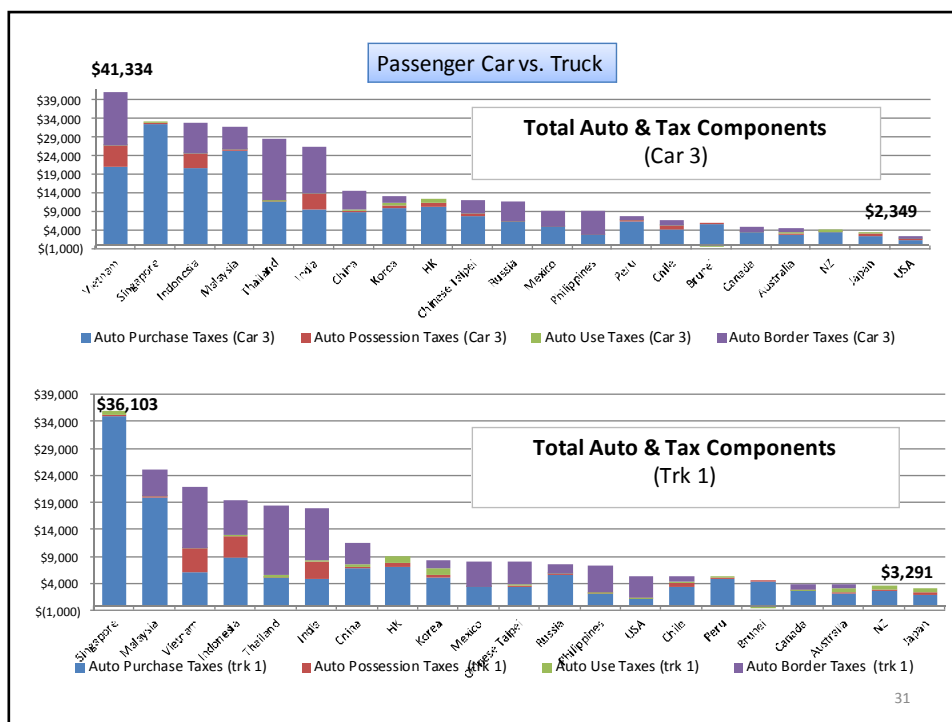


APEC Auto Tax Findings

Car vs. Truck

Taxes have a significant impact on the composition of the domestic auto market.

- For example, several economies have adopted tax policies that favor pickup trucks over cars.
- Overall auto taxes on pickup trucks compared to cars is significantly lower (except Singapore and the USA).
- The economies providing the biggest tax breaks for trucks are Indonesia, Korea, Thailand, Vietnam and Russia- with 50% or more lower taxes.



Tax Incentives: Initial Findings

- Most APEC economies have tax incentives for “New Energy”, “Alternative Fuel”, “Fuel Efficient”, or “low carbon output” vehicles.
- Many target specific technologies, such as: Hybrid EVs, Full Electric vehicles, and a Fuel Cell vehicles. Others target fuel efficiency & carbon output performance.
- Core goals for auto tax incentives are often-fuel efficiency, lower emissions (carbon & others), energy independence, at the lowest cost to society.
- Independent experts/studies concur that performance-based tax incentives that more directly link to primary goals is the best practice.
- This is because it allows new auto technologies and innovations to emerge based on merit, instead of incentives. It can also help avoid technology delays, dead ends, or second-best solutions.
- More analysis should be done in the auto tax incentive area.

Conclusions

- Regardless of the vehicle characteristics the two biggest contributors to the differences in total taxes are Purchase and Border taxes.
- Three auto tax burden categories emerge often reflecting level of development (GDP/Capita, and auto tax revenue needs).
- Taxes have a powerful influence on market configurations (Car vs. truck- with trucks incentivized over cars).
- As economies move up the development curve, they recalibrate the auto tax burden and structure helping, not hindering, auto industry competitiveness.
- Most APEC economies have tax incentives, with many targeting specific technologies and some based of performance. Performance-based tax incentives, more directly reflecting economies' core goals, should be considered.
- After 10-years, the possession and auto use taxes represent a much larger proportion of the cost of a vehicle, and the comparative tax burdens of shift among economies. This is most evident in Japan.

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Next Steps

- Present these factual findings to the APEC Committee on Trade and Investment (CTI).
- Collect from each economy:
 - The total amount of revenue collected under each of the tariff and tax headings in a specified year.
 - Revenue collected per car sold
 - A comparison of auto taxes to other product specific taxes in each economy.

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THANK YOU

Questions?

