

The last 25 years; a retrospective

Pedro van Meurs

November 4, 2014

**25th International Petroleum Tax Conference
Oslo**

**Van Meurs Corporation
Nassau, Bahamas
Tel: (242) 324-4438
e-mail: info@vanmeurs.org**

Three Phases

Over the last 25 years there have been three phases of petroleum contractual and fiscal development:

1989 – 2003 : The supply of conventional acreage for exploration and production rapidly expands.

Downward pressure on government take.

2003 – 2009 : The supply of conventional acreage stagnates, but strong development of LNG.

Upward pressure on government take for Oil, not for Gas

2009 – 2014: The unconventional era begins

Downward pressure on government take

1989 – 2003: Expansion of Acreage

During the 1989 – 2003 period there was a significant expansion of acreage:

- ❑ **Many countries opened their doors for private investment:**
 - Some countries selected **PSCs**, such as the **Former Soviet Union** and **East and South Asia**.
 - Other countries selected **Concessions/Licenses** such as **Eastern Europe** and **Latin America**.
 - **Russia** moved to the Concession system by the end of the period.

1989 – 2003: Expansion of Acreage

During the 1989 – 2003 period there was a significant expansion of acreage:

- ❑ **There was a rapid development of deep water developments:**
 - **Concessions/Leases** were prevailing in the **US Gulf of Mexico** and **Brazil**.
 - **PSCs** continued in **East and South Asia** , while **West Africa** moved out of **Concessions** into **PSCs**.
- ❑ **Some Middle East countries** tried to open up with **Risk Service Contracts**, but these efforts largely failed.

2003 – 2009: Stagnation and LNG

During the 2003 – 2009 the availability of conventional acreage stagnated since most of the world had opened up and most deep water was available. This stagnation together with higher oil prices resulted in three trends:

- Upward pressure of government take for oil**

Introduction of R-factors and Windfall Profit Taxes, UK and other jurisdictions increase government take.

- Development of LNG and separation of Oil and Gas Terms**

Gas terms become different from Oil terms

- Internationalization of the players**

Russian and Chinese companies, Petronas, Petrobras and other companies from emerging countries become major players.

2003 – 2009: Separate terms for Oil and Gas

Jurisdictions with Gas-Favourable Fiscal Terms			
Argentina	Egypt	Mali	Sierra Leone
Australia	Ethiopia	Morocco	South Sudan
Belize	France	Nicaragua	Sudan
Benin	Ghana	Niger	Tanzania
Brunei	Guatemala	Nigeria	Thailand
Cambodia	India	Oman	Trinidad & Tobago
Cameroon	Indonesia	Pakistan	Tunisia
Canada - Alberta	Iraq - Kurdistan	Papua New Guinea	Ukraine
Canada - British Columbia	Kazakhstan	Paraguay	United Kingdom
Canada - Nfld. & Lab. (Proposed)	Kyrgyzstan	Poland	USA-Arkansas
Canada - Nova Scotia	Laos	Portugal	USA-Louisiana
Central African Republic	Latvia	Qatar	USA-Michigan
Chad	Liberia	Russia	USA-North Dakota
China	Libya	Sao Tome & Principe	Venezuela
Colombia	Madagascar	Saudi Arabia	Vietnam
Cote de l'voire	Malaysia	Senegal	Zambia
<p>Explanation:</p> <p>Gas-Favourable means that the fiscal systems include fiscal features which are lower for gas than for oil, such as lower royalties for gas than for oil. In case of sliding scales sometimes the system includes an attractive energy conversion factor for gas. Production sharing contracts could have lower profit gas and higher cost gas. Windfall profit features, excise taxes or other taxes may apply to oil but not to gas. Some favorable features apply to shale gas or CBM.</p>			

2009 – 2014: The Unconventional Era begins

During the 2009 – 2014 the Unconventional Era begins and is facilitated by the failure of the “Arab Spring”.

❑ Unconventional developments

The development of shale oil and shale gas which started in North America is now spreading internationally based on more favorable terms, creating downward pressure on government take.

❑ Chaos in the MENA region

Libya fails to develop new terms, the Iraq Risk Service Contracts fail to deliver, Iran in paralysis on the nuclear issue, Kurdistan region potential blocked.

❑ New terms in Brazil, Russia and Mexico

Brazil opens Pre-Salt with PSC terms. Russia opens offshore with attractive concession terms. Mexico changes the Constitution.

2009 – 2014: New Unconventional Terms

Examples of fiscal terms for unconventional

	Oil Sands	Shale Oil	Shale Gas	CBM	Tight Gas	Tight Oil	Horiz Wells	High Cost
Alberta	X		X	X			X	
British Columbia			X	X				
Arkansas								X
Louisiana							X	
Montana							X	
North Dakota		X					X	
Utah		X						
Algeria		X	X	X				
Argentina					X			
China			X	X				
Colombia		X	X	X	X	X		
Indonesia			X	X				
Pakistan					X			X
Poland		X	X	X				
Russia		X			X	X		
United Kingdom		X	X					X

Countries changing petroleum arrangements

Over the last 25 years there has been a movement out of PSCs and into PSCs as follows:

Countries moving out of PSCs

Russia, Kazakhstan, Eastern Europe, Algeria, Bolivia

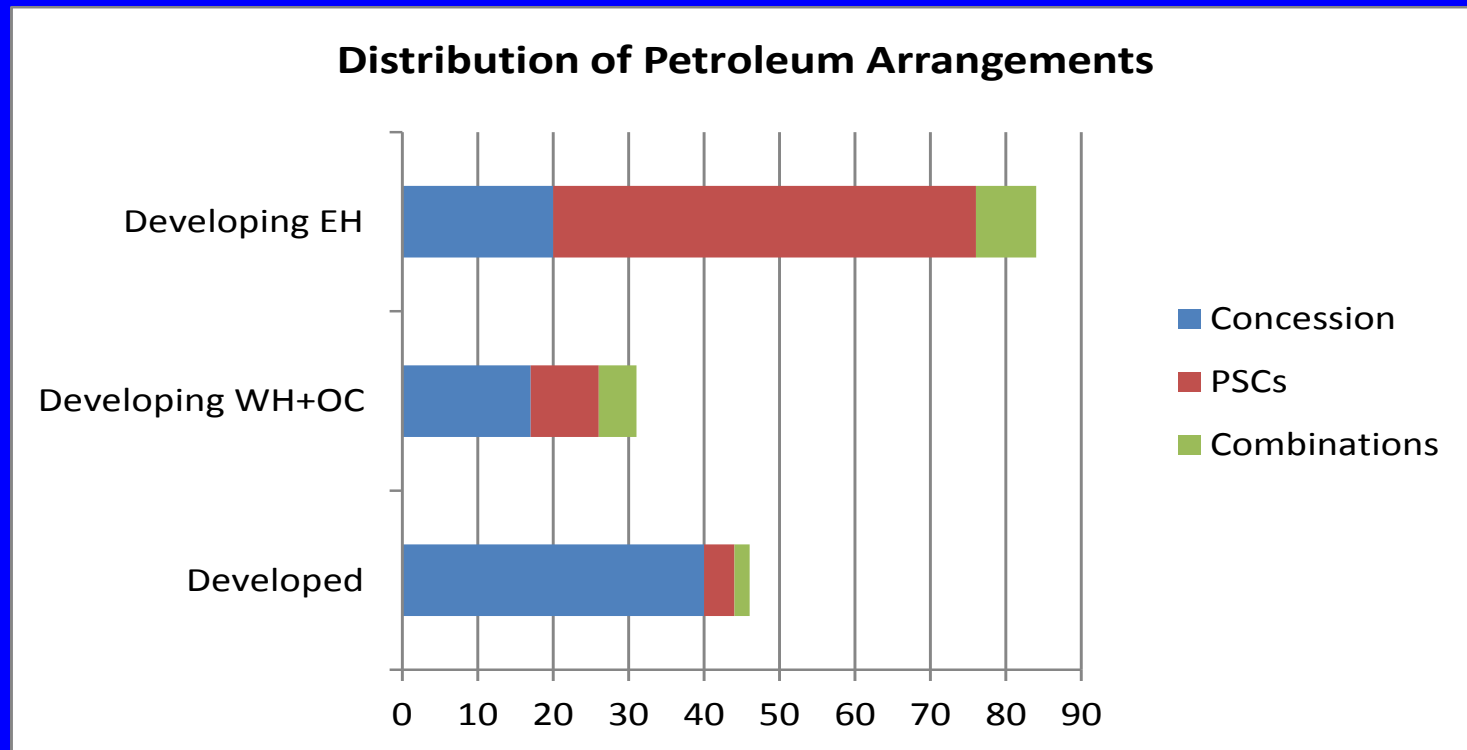
Countries moving into PSCs

Many African countries: Nigeria, Angola, Cameroon, Niger, Gabon, Congo (DR),

and

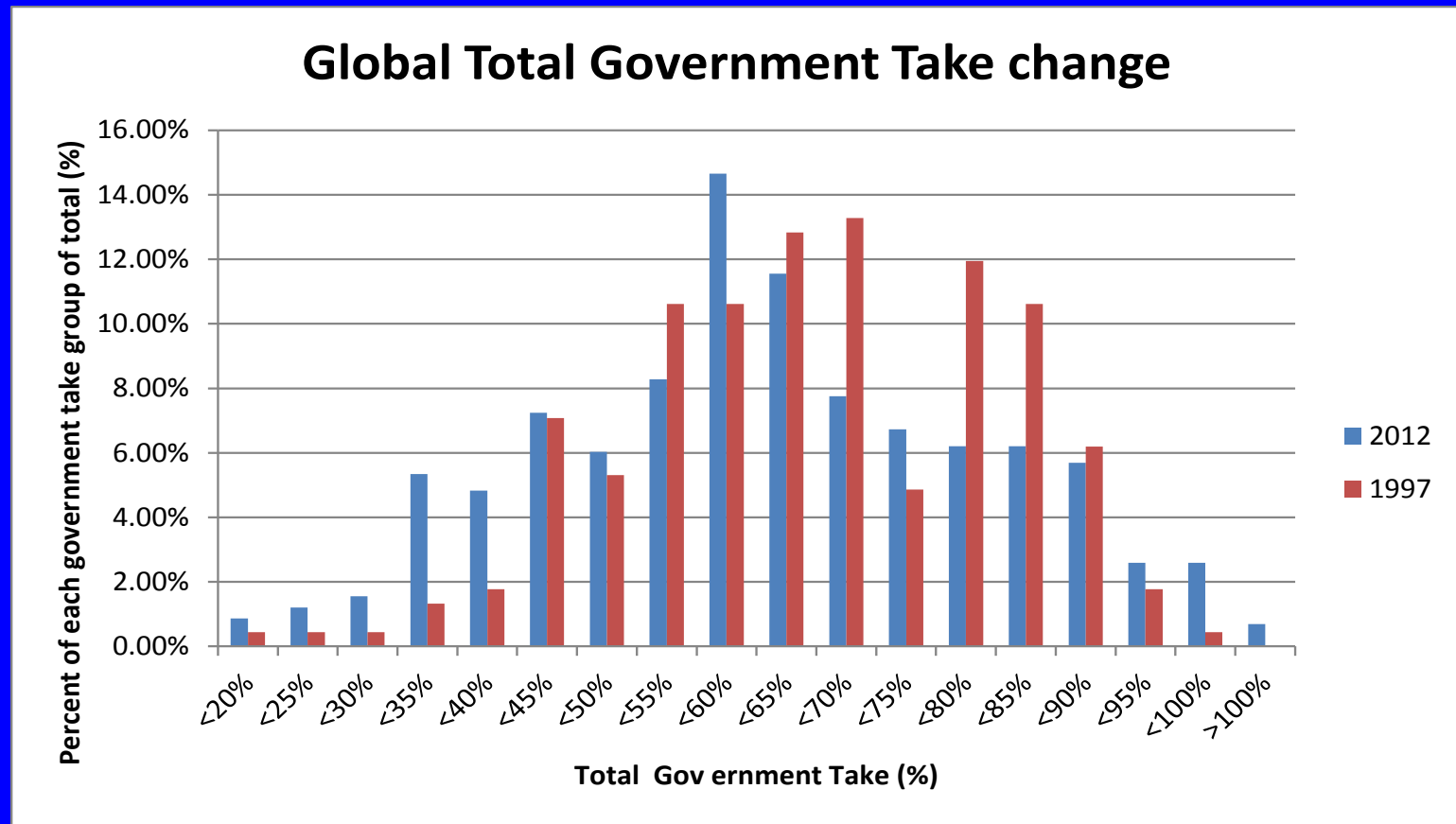
Kurdistan in Iraq, Cyprus, Brazil, Uruguay and Mexico

Distribution of Petroleum Arrangements



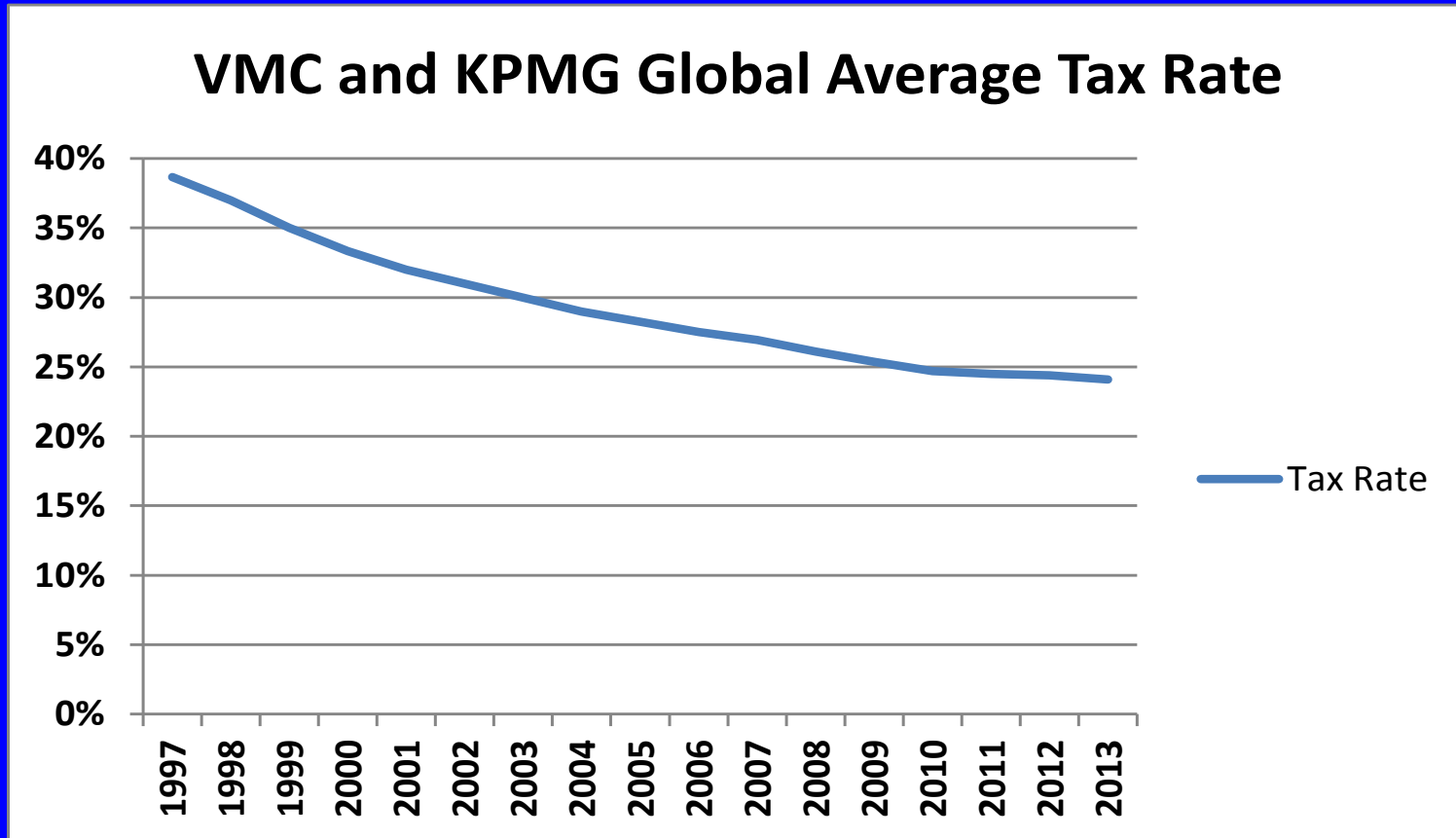
Of the 161 countries, Concessions/Licenses/Leases are largely concentrated in Developed Countries, while PSC prevail in the Developing countries of the Eastern Hemisphere. During the last 25 years there has been a gradual conversion to PSCs in Africa South of the Sahara.

Total Government Take change since 1997



In 1997 Van Meurs did a study covering 144 countries and in 2012 160 countries. In general there have been two important trends since 1997: a lowering of the total government take by about 10% and a flatter distribution.

Total Government Take change since 1997



Since 1997 the average world corporate income tax rate has dropped by about 15%.

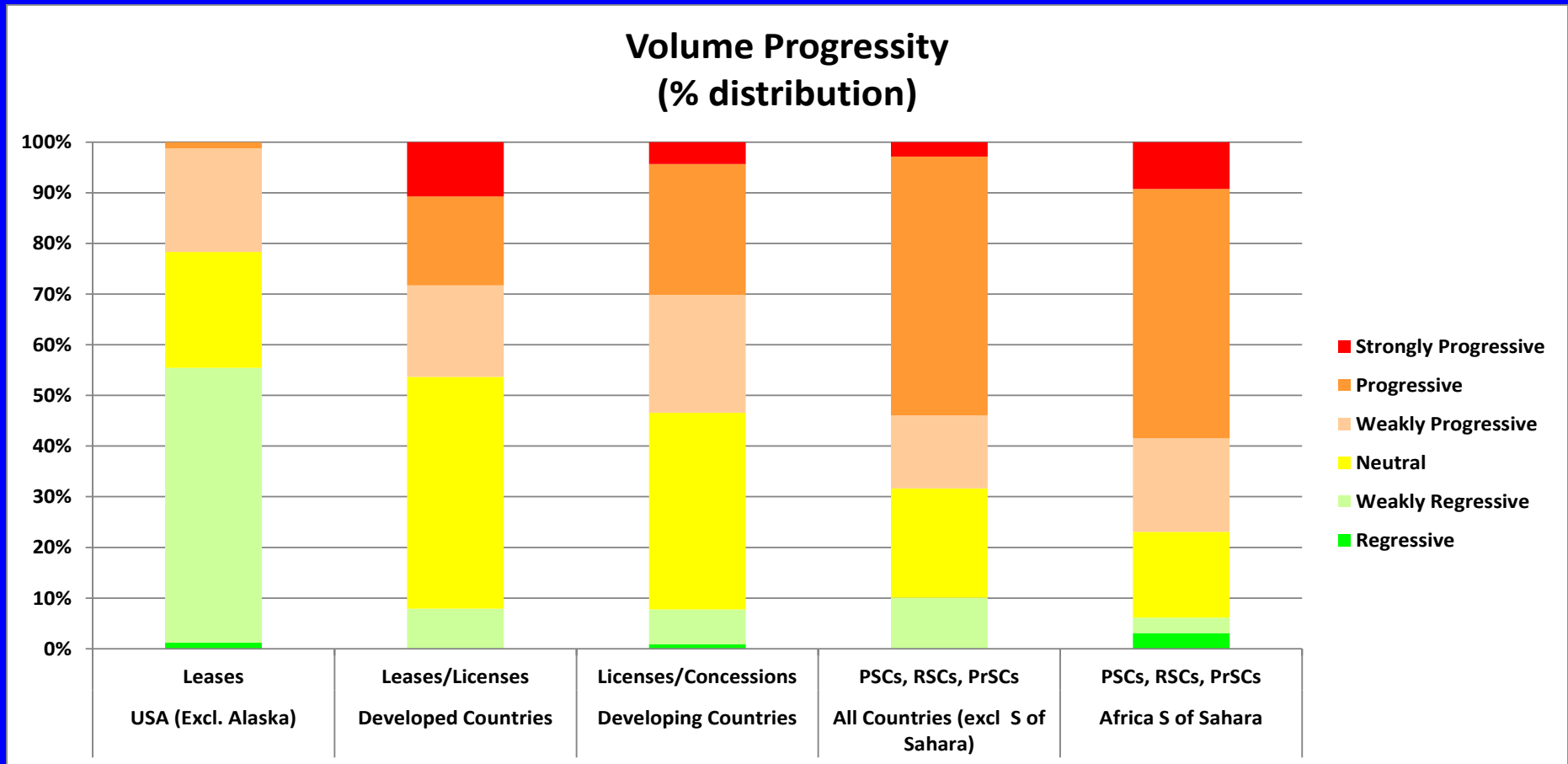
Different Paths in Government Take structure

Over the last 25 years nations have increasingly diverged in their resource wealth maximization strategies:

- ❑ Half the countries remain oriented on volume progressivity
- ❑ One third of the countries is focused on price progressivity
- ❑ About 20% of the countries are focused on cost progressivity.

However, there are very large regional differences in these strategies.

Volume Progressivity



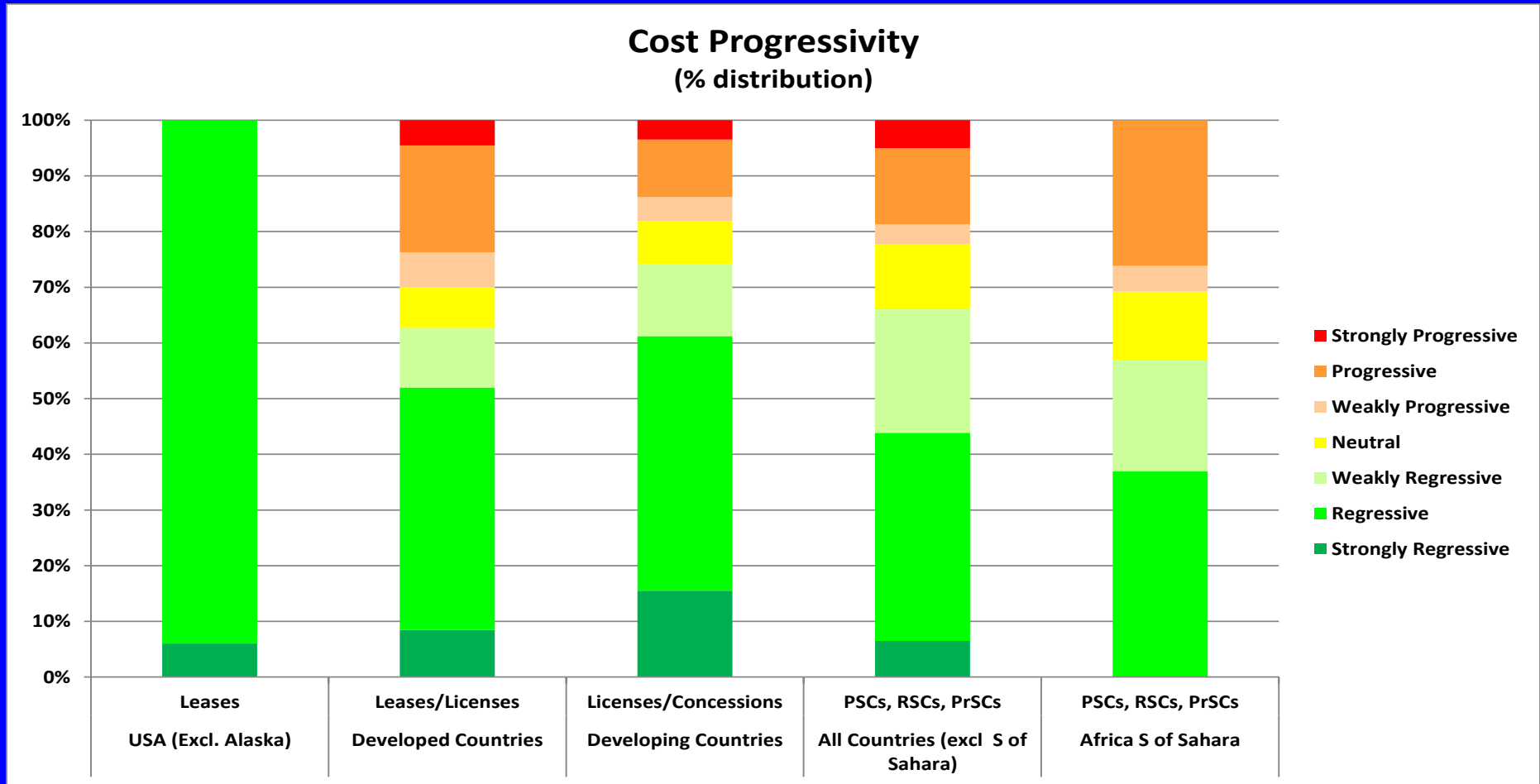
PSCs are largely volume progressive, in particular in Africa South of the Sahara.

Price Progressivity



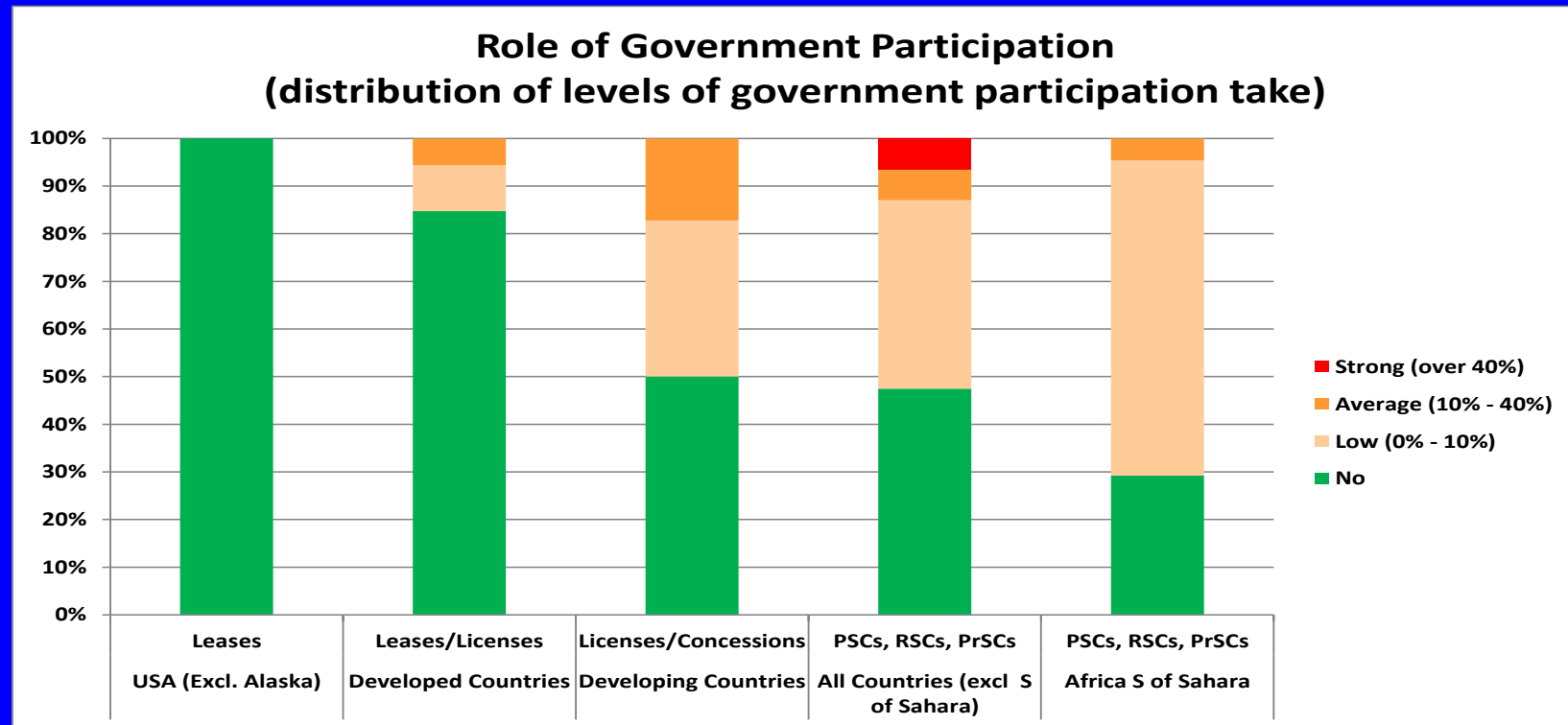
Developing countries with Concession systems opted largely for price progressivity.

Cost Progressivity



Cost progressivity is generally modest around the world. However, most prevailing in Developed Countries.

State Participation



State participation features in the arrangements of 69 countries, in particular Africa South of the Sahara. Nevertheless, typically the Government Participation Take is less than 10%. A new trend is to have participation from “day 1”

Increase in Complexity of Fiscal Terms

Over the last 25 years fiscal terms have become increasingly more complex. For instance, there are now:

- **20 different R-factors,**
- **28 different types, scales or formulas for royalties,**
- **35 different ways to structure profit oil/cost oil,**
- **31 different ways to orchestrate government participation,**
- **12 different price sensitive windfall profit features**

This wide diversity illustrates that governments seem rather isolated from each other in terms of world fiscal knowledge.

There has been increasingly an “ad-hoc” approach to fiscal design by many governments.

Increased diversity of government take

Over the last 25 years there has been an increased diversity of fiscal terms related to different types of oil and gas:

- **LNG,**
- **shale gas and shale oil,**
- **coal bed methane**
- **heavy oils**
- **viscous oils**
- **oil sands**
- **high temperature – high pressure conditions**
- **Enhanced oil recovery**

•

Increased Uncertainty about the Long Term

Mainly due to climate change issues, but also due to the rapid progress of renewable energy, uncertainty about the long term future has become an increasing feature.

We do not know whether the world will be producing in 2050: 130 million barrels per day or 50 million barrels per day.

To underline this issue: The International Panel on Climate Change recommended on November 1, 2014, that by 2050 most electricity should be generated from non fossil fuel resources and by 2100 all fossil fuels should be phased out.