

Comparative Analysis of Alaska's Oil and Gas Fiscal Terms and the Fair Share Act Ballot Initiative

Prepared for American Petroleum Institute

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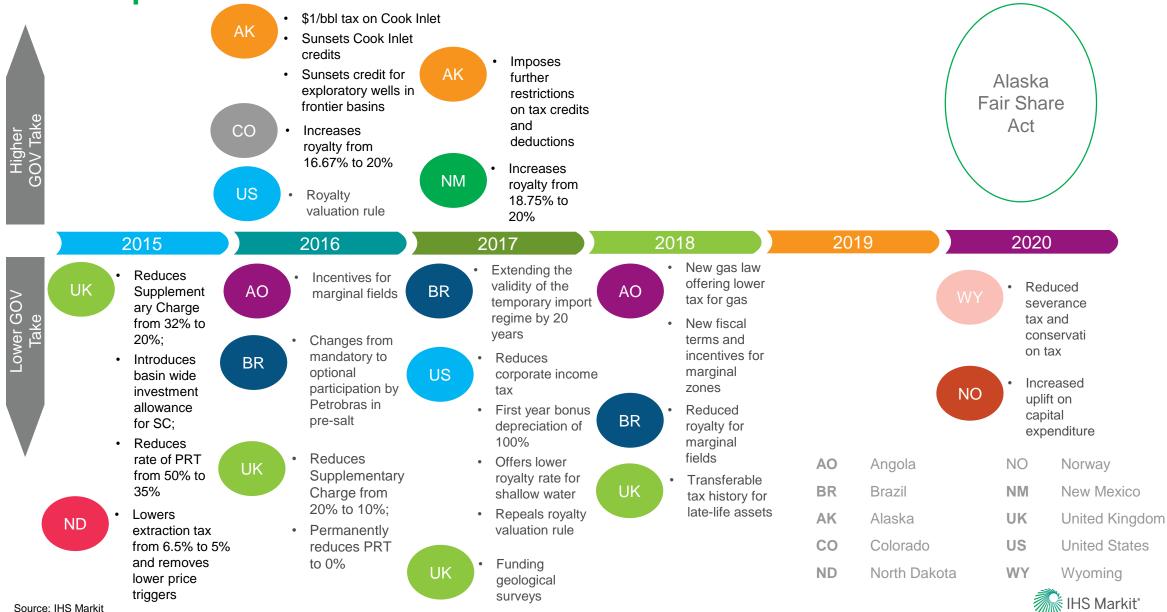
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Executive summary

- The Fair Share Act ballot initiative is introduced at a time when the oil industry faces twin crises—the COVID-19 and the oil price crash. While the measure is likely to have a devastating impact to oil and gas investment in the state in the current low oil price environment, the measure is not sustainable even under a long-term base case scenario of \$60/bbl.
- Alaska's current fiscal system is one of the least competitive ones within US and international peer groups in terms of \$/bbl present value accruing to investors. A combination of relatively higher unit costs needed to bring Alaskan North Slope crude oil on stream contribute to lower project profitability compared with Lower 48 and international jurisdictions. The provisions of the Fair Share Act further deteriorate Alaska's competitive position. The ballot initiative is expected to affect 84% of the current production the state.
- The impact of the Fair Share Act exacerbates as commodity prices recover to the long-term base case scenario of \$60/bbl. At prices above \$60/bbl the NPV of Alaskan projects suffers a loss of \$450 \$700 million per project.
- Alaska's fiscal system becomes one of the least competitive oil and gas fiscal systems in the US under the Fair Share Act. Alaska's ranking within the international peer group erodes as well under the Fair Share Act.
- Since 2006 the Alaskan oil and gas fiscal system has undergone frequent changes, resulting in fiscal instability and loss
 of investor confidence in the state. The introduction of the Fair Share Act goes against a recent trend by the majority of
 the jurisdictions towards lowering the government take. Such a measure comes at a time when other states have either
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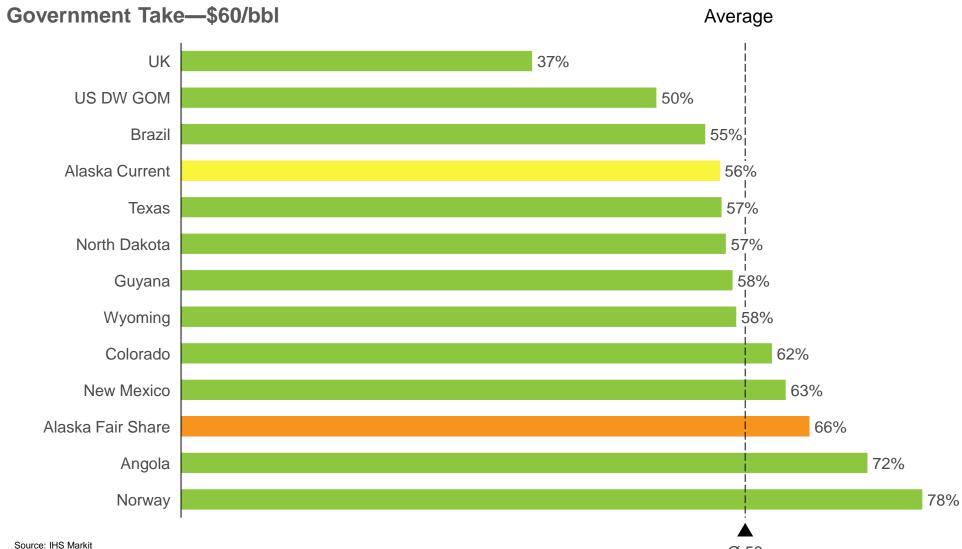


Most of the jurisdictions in the peer group improved fiscal terms since the 2014 oil price crash



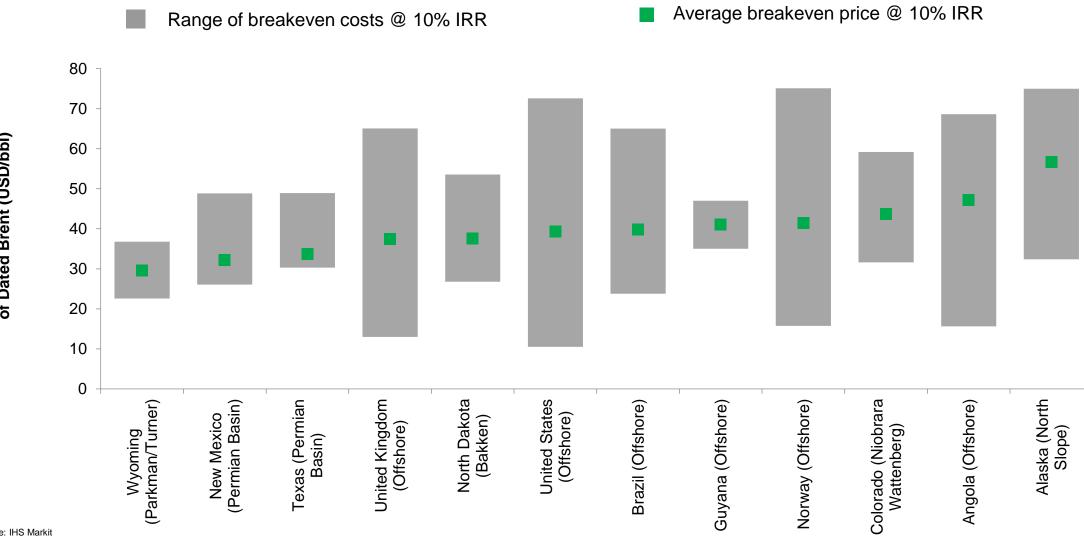
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The Fair Share Act erodes the competitiveness of Alaska's oil and gas investments in the US and internationally





Alaska's North Slope higher unit costs require on average higher commodity prices for investments to break even at 10% rate of return

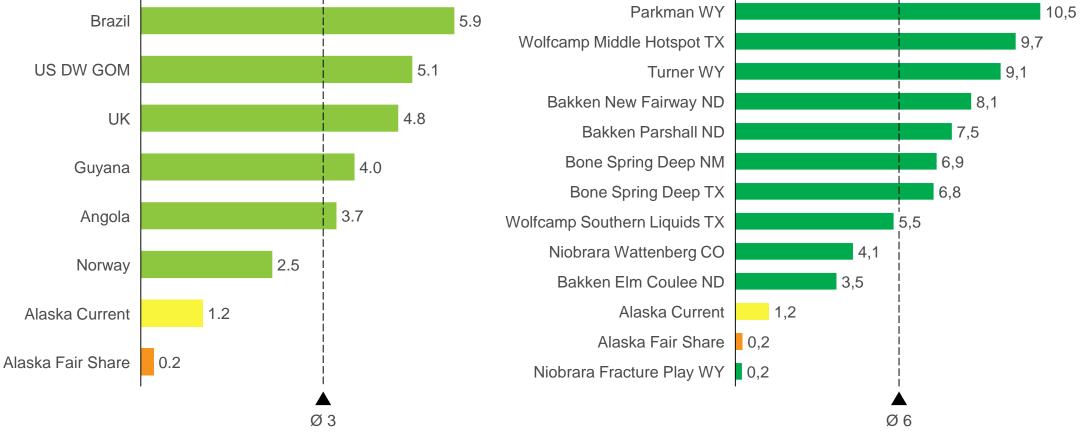


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Alaska's current and proposed fiscal systems are the least competitive within the international and US peer groups in terms of \$/bbl present value

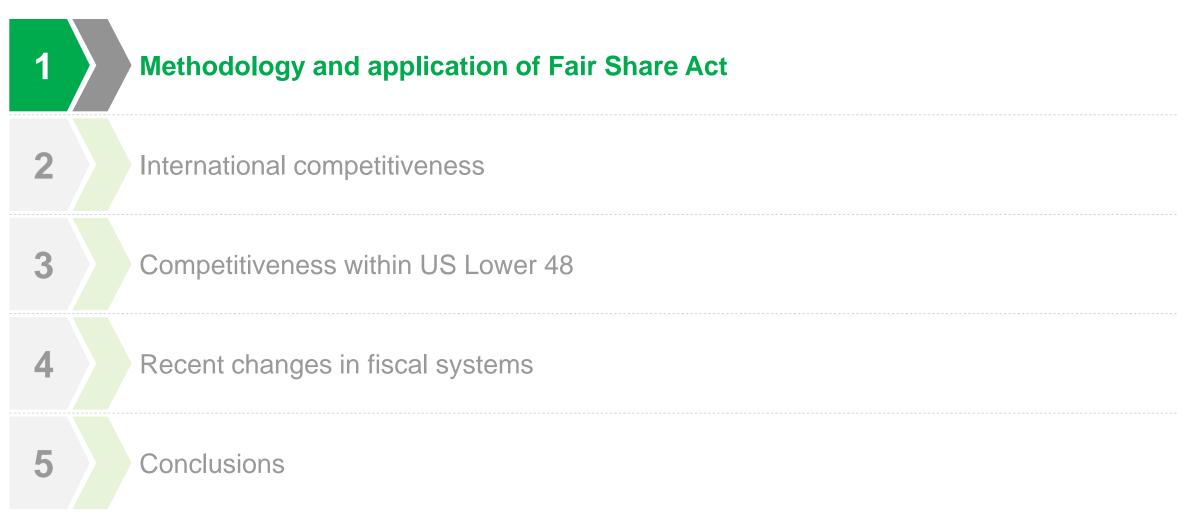


US Peer Group NPV per BBL—\$60/bbl



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Methodology

- Peer group selection
 - > Alaska's oil fields compete for investment in the domestic and international market
 - Deepwater offshore oil fields are considered comparable with Alaskan North Slope oil fields in terms of reserve size as well as cost of development and production
 - In the domestic market Alaska's North Slope competes with tight oil plays in the Lower 48
 - > A theoretical conventional oil field of 500 million barrels of oil is modeled onshore Alaska North Slope and compared to 500 million barrel oil fields in deepwater Angola, Brazil, Guyana, Norway, UK and the U.S. Gulf of Mexico. Brownfield developments have been used for this analysis.
 - The development concepts feature the actual cost of developing a 500 MMbbl oil field in the respective jurisdictions accounting for differences in water depth, total vertical depth, regional costs, distance from liquid markets, well output etc. 2020 costs have been used for this analysis.
 - > Comparison with investment opportunities in the lower 48 focuses on tight oil and shale plays in Colorado, New Mexico, North Dakota, Texas and Wyoming. Single well economic models have been used for this analysis representing average type curves for each play
- A 10% discount rate is used for this analysis under four oil price assumptions of \$25, \$35, \$60, \$85 in real terms throughout the project lifecycle.
 - > The \$60/bbl price represents the base case scenario pre COVID-19. The assumption is that \$60/bbl will ultimately be the base case scenario in post COVID-19 world.



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Scope of Fair Share Act Ballot Initiative

This is a tax on oil only in addition to the current production tax for fields, reservoirs and units north of 68 degrees north

The tax only applies after 400MMbbl of oil have been produced and if the production rate was over 40kbbld in the prior 12 months

No credits or offsets are applicable and the tax cannot be reduced below the Alternative Minimum Tax



80

60

40

20

0

Fair Share tax applicable Fair Share tax not applicable Example 500MMbbl Green Field

Brownfield projects may experience the liability of Additional Production Tax immediately

Production Profile

9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 2 3 5 4

Fair Share Act 35% Production Tax + 15% of the difference between \$50/bbl and the Production Tax Value¹ of oil

Pay the greater of:

Or

Alternative Minimum Tax 10% to 15% of the percentage of the Gross Production Value² of oil The tax rate is 10% for ANS Prices under \$50. An additional 1% is paid for within each \$5/bbl increment beyond \$50/bbl up to \$70

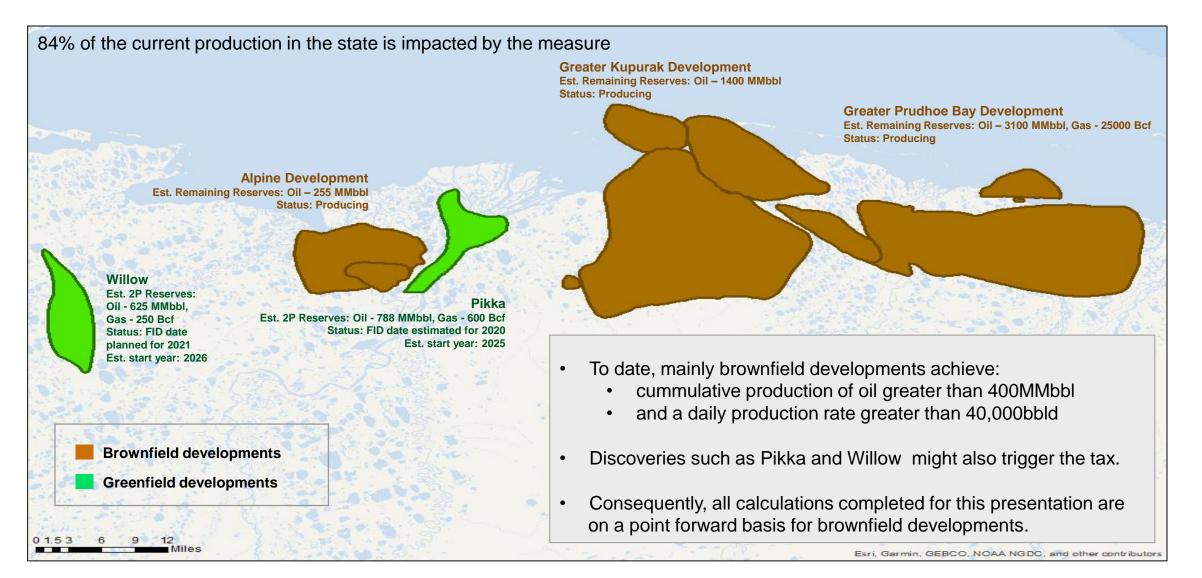
Note:

- ¹Production Tax Value is the same taxable base per unit that is calculated for the production tax. It is net of royalty and certain E&P cost. There is ring-fencing for Fair Share Act purposes: i.e. use of excess lease expenses in non-targeted fields against targeted fields is now disallowed
- ²Gross Production Value is net of transportation costs and royalty



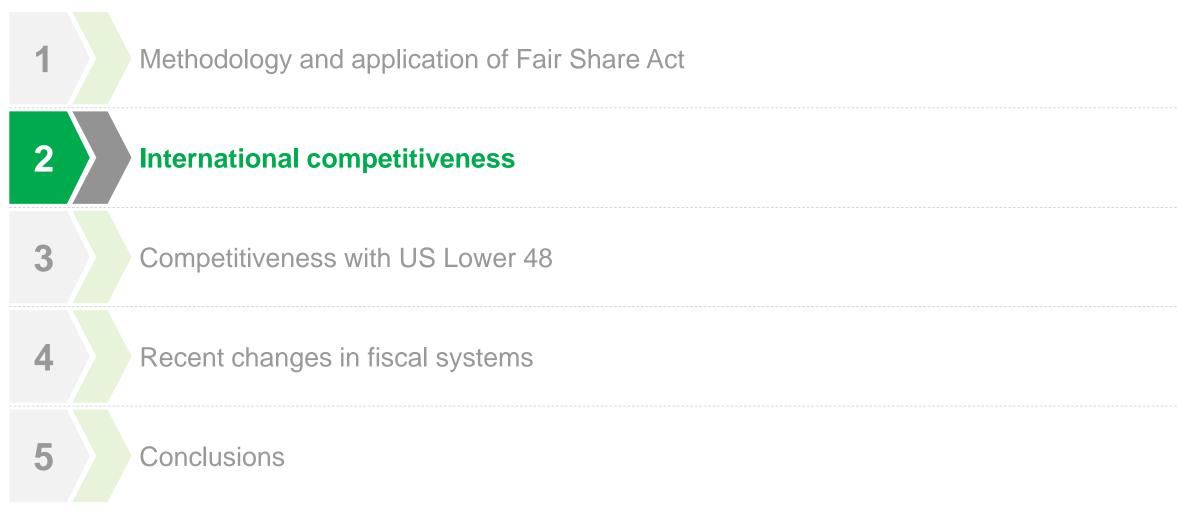


North Slope brownfield developments are more likely to be affected by the Fair Share Act initiative





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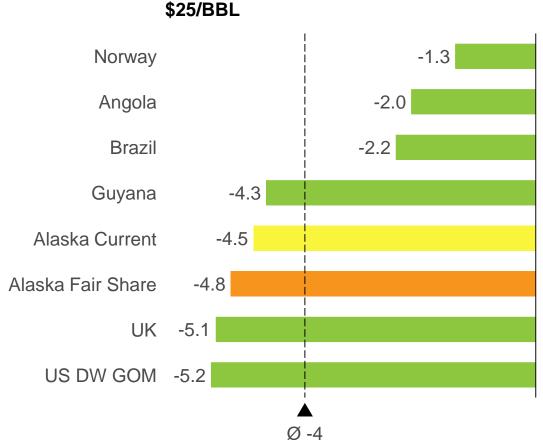


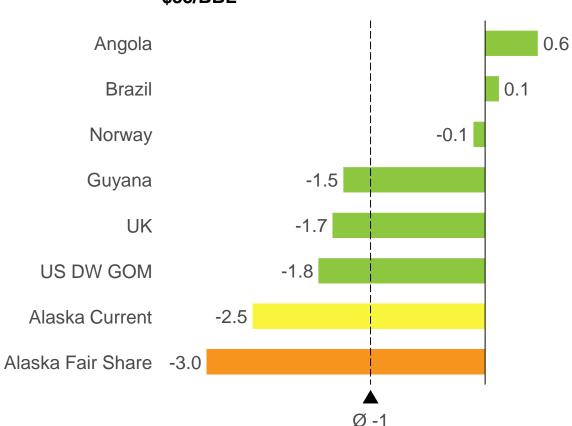


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Alaska's oil fields and most deepwater projects are uneconomic at oil prices of \$25 and \$35 per barrel. Alaska's competitiveness deteriorates under the Fair Share Act as commodity prices increase

International Peer Group Development Forward NPV per BBL USD / BBL



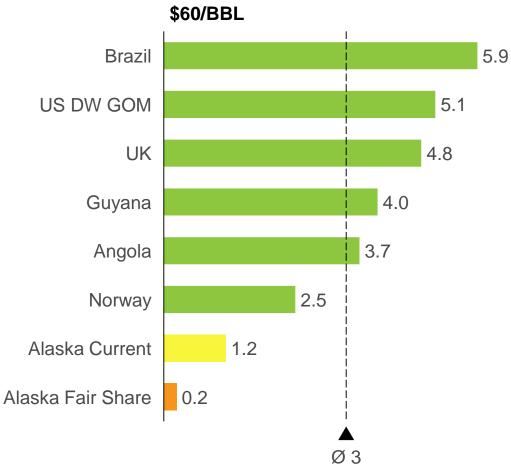


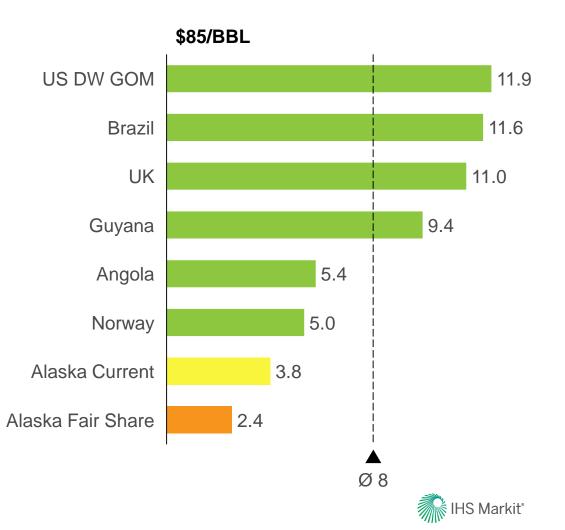
\$35/BBL

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At prices above \$60/bbl Alaska's proposed fiscal system is the least competitive within the international peer group

International Peer Group Development NPV per BBL USD / BBL

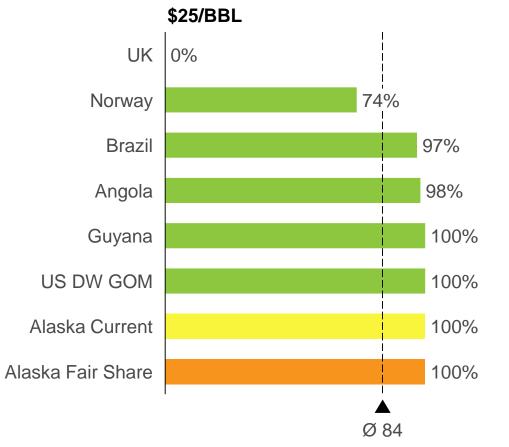


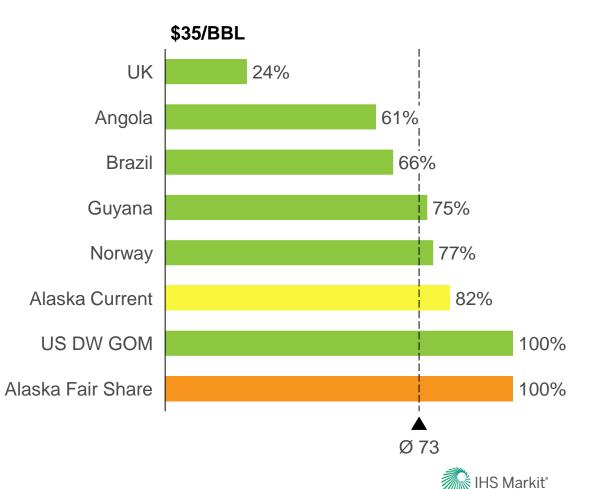


From a government take perspective Alaska ranks at the bottom of the pack in the low oil price environment

International Peer Group Development Forward Government Take

Percent of Contractor Divisible Income





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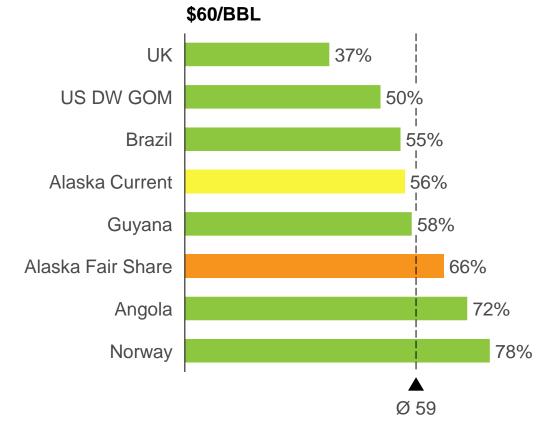
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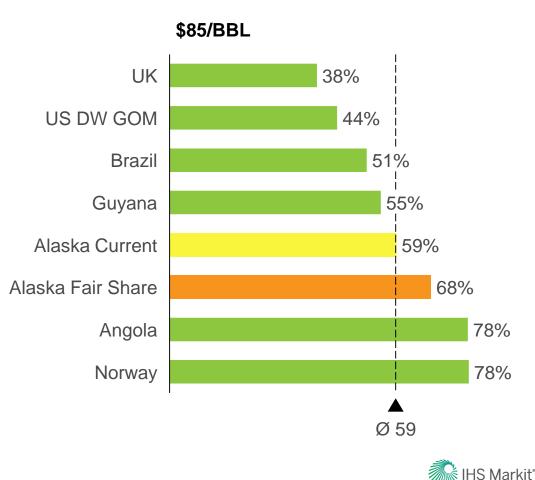
At or above \$60/bbl Alaska's government take slides towards the bottom of the peer group

Fair Share Act increases government take by 9-11 percentage points, further eroding Alaska's competitive position

International Peer Group Development Forward Government Take

Percent of Contractor Divisible Income

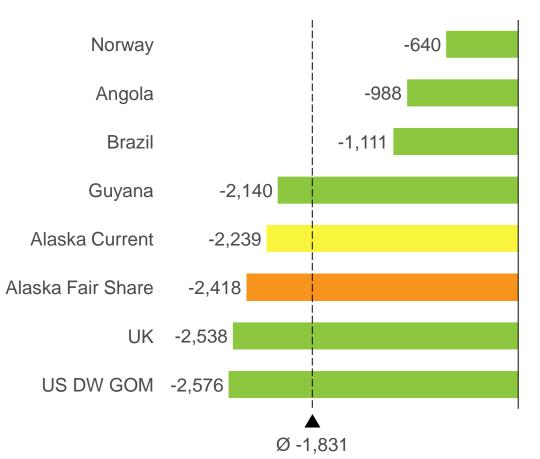




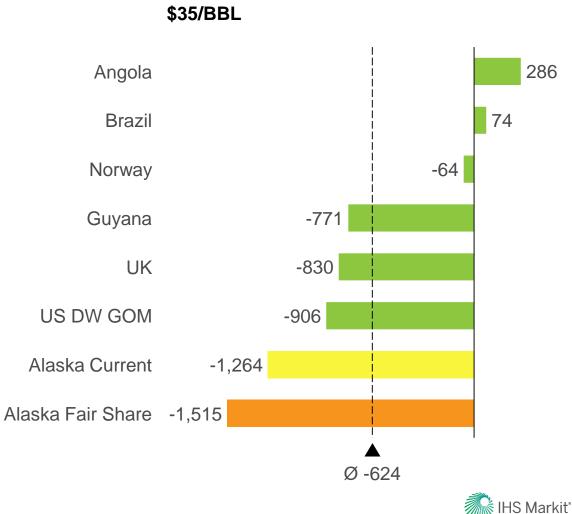


Alaska's NPV erodes by about \$200 million in the low oil price environment

International Peer Group Development Forward NPV Million USD



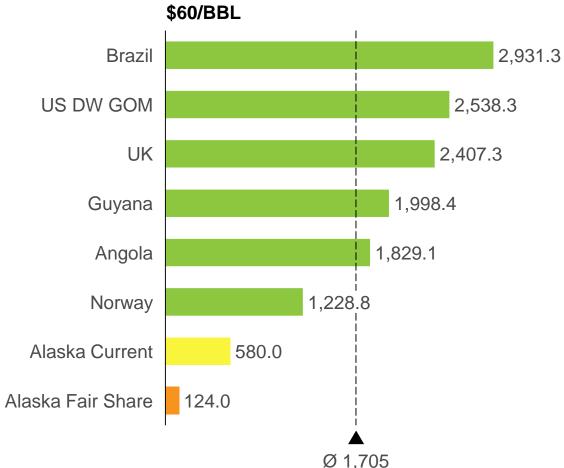
\$25/BBL

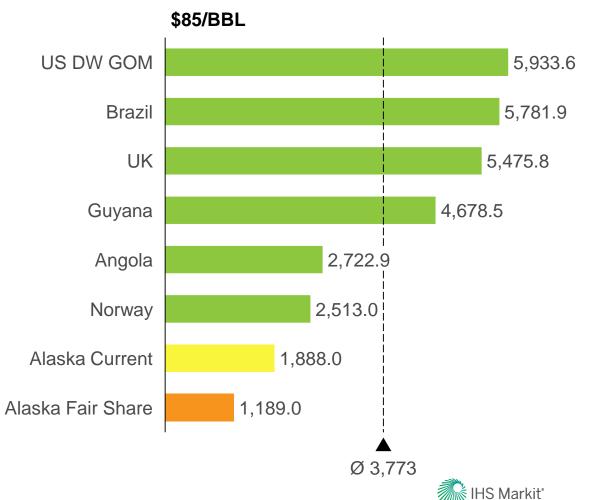


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At prices above \$60/bbl the NPV of Alaskan projects suffers a loss of about \$450 - \$700 million per project

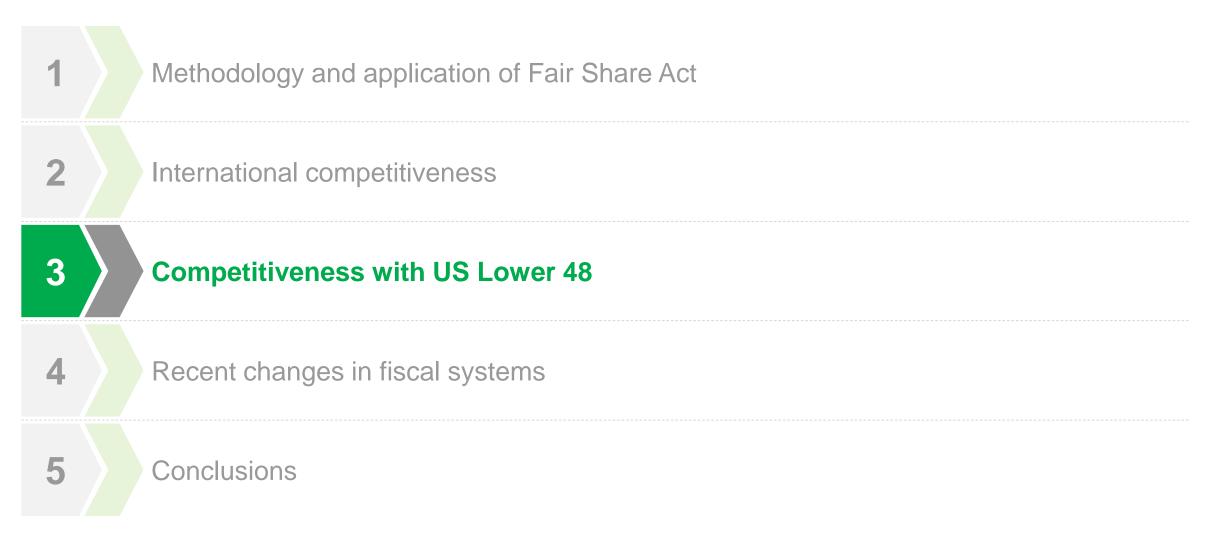
International Peer Group Development Forward NPV Million USD





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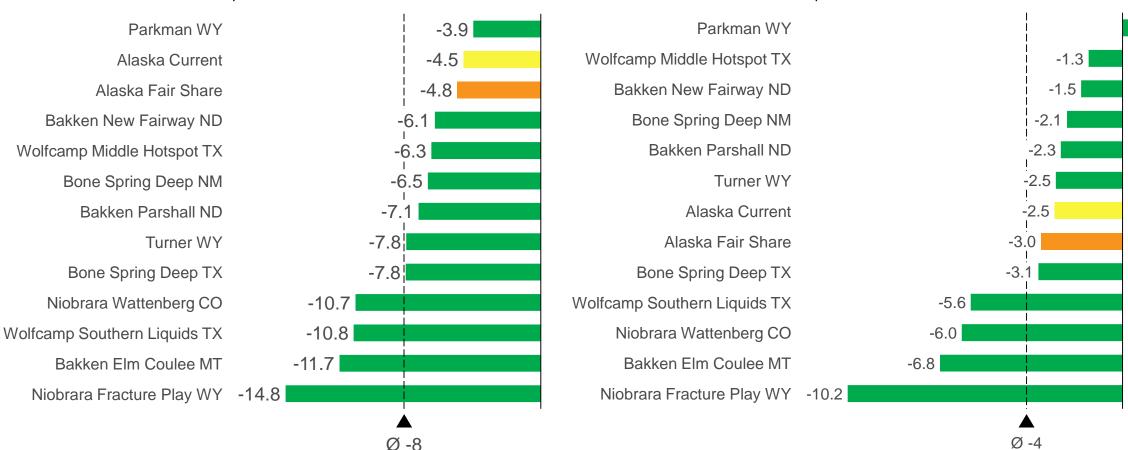




Low oil prices of \$25 to \$35 per barrel do not favor the development of most projects in the US

\$35/BBL

USD / BBL



\$25/BBL

Source: IHS Markit



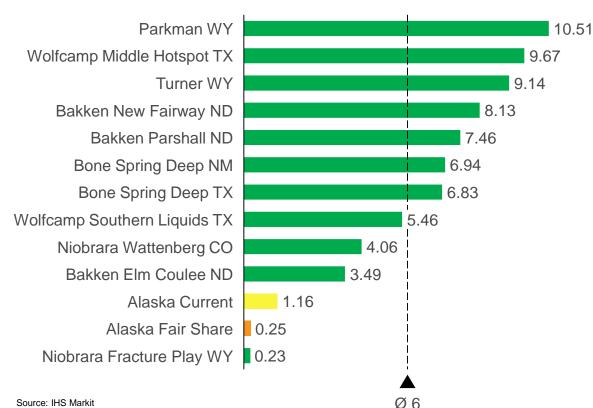
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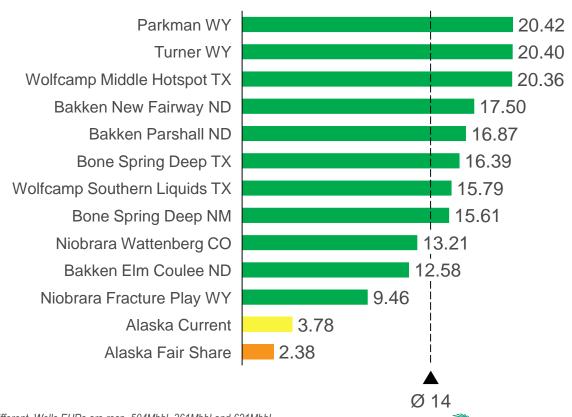
At and above \$60/bbl oil prices Alaska's fiscal systems generate significantly less value per barrel than Lower 48 tight oil plays

The Fair Share Act ballot initiative further erodes the weak competitive position of Alaskan oil fields

USD / BBL



\$60/BBL



\$85/BBL

Note: the closeness of unit NPV for the Parkman, Turner and Wolfcamp projects is a mathematical coincidence. Type curves are different. Wells EURs are resp. 504Mbbl, 361Mbbl and 621Mbbl. Wells resp. NPVs are 10.29MM\$, 7.36MM\$ and 12.64MM\$

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The passage of the Fair Share Act would increase Alaskan government take by 18 percentage points in the low oil price environment, making it even less likely for project sanction

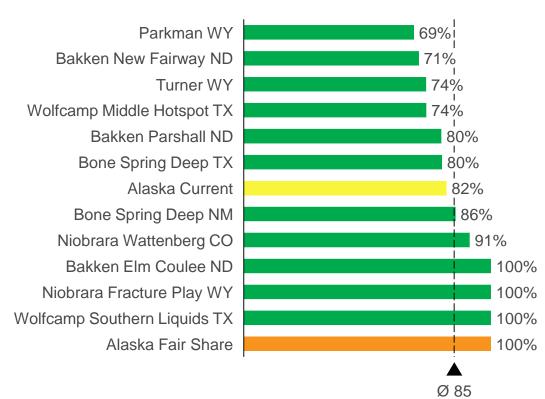
US Peer Group Development Forward Government Take

Percent of Contractor Divisible Income

Bakken New Fairway ND	100%
Bakken Parshall ND	100%
Bakken Elm Coulee ND	100%
Bone Spring Deep NM	100%
Bone Spring Deep TX	100%
Niobrara Fracture Play WY	100%
Niobrara Wattenberg CO	100%
Parkman WY	100%
Turner WY	100%
Wolfcamp Middle Hotspot TX	100%
Wolfcamp Southern Liquids TX	100%
Alaska Current	100%
Alaska Fair Share	100%
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\$25/BBL

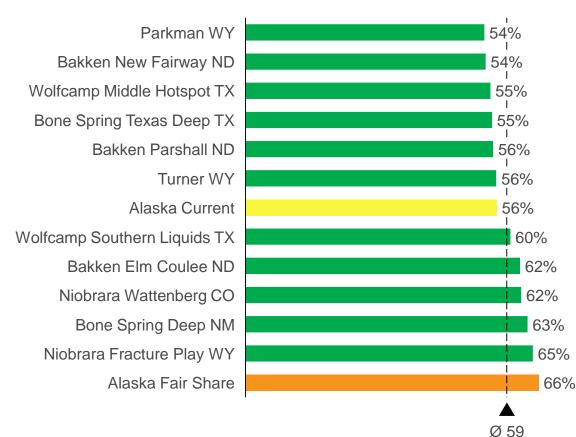
\$35/BBL



As prices increase Alaska's competitiveness with the US Lower 48 tight oil plays deteriorates to the least competitive in the peer group

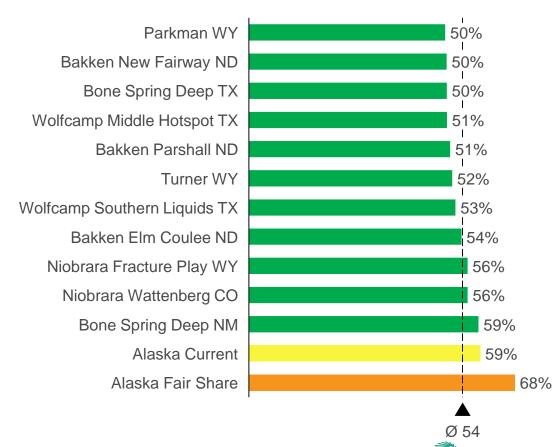
Unconventional Peer Group Development Forward Government Take

Percent of Contractor Divisible Income



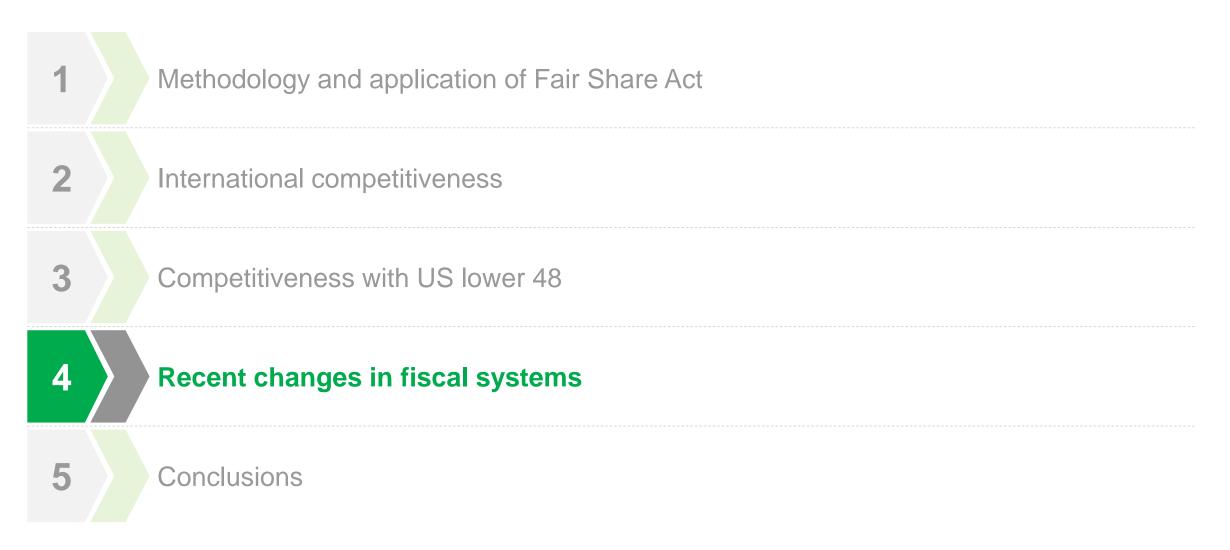
\$60/BBL

\$85/BBL



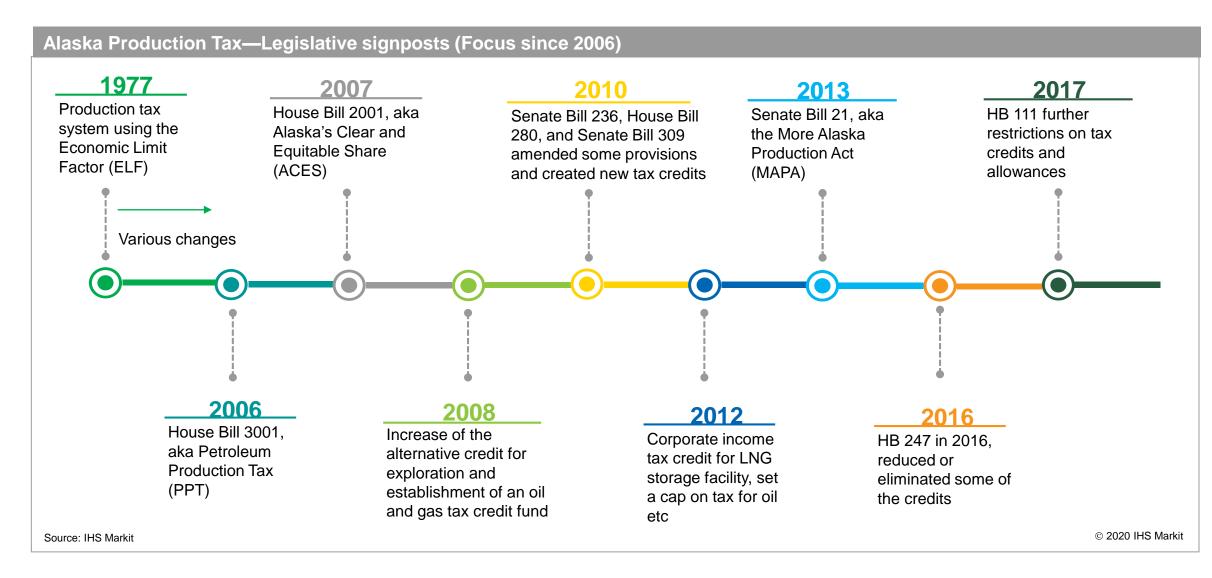
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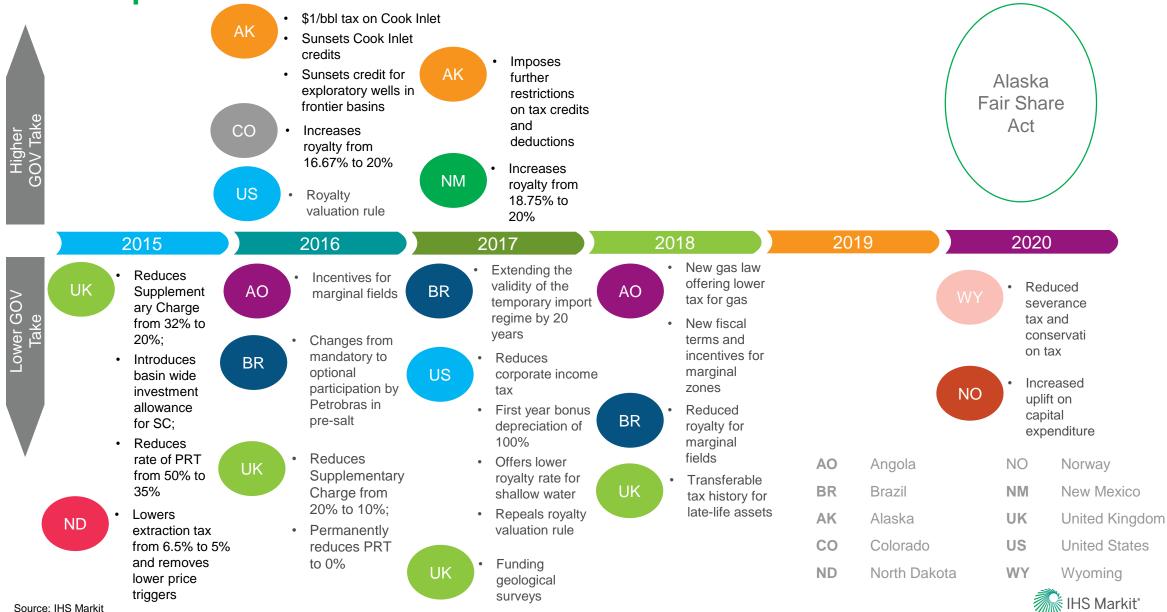
Alaska has one of the most unstable oil and gas fiscal systems in the world





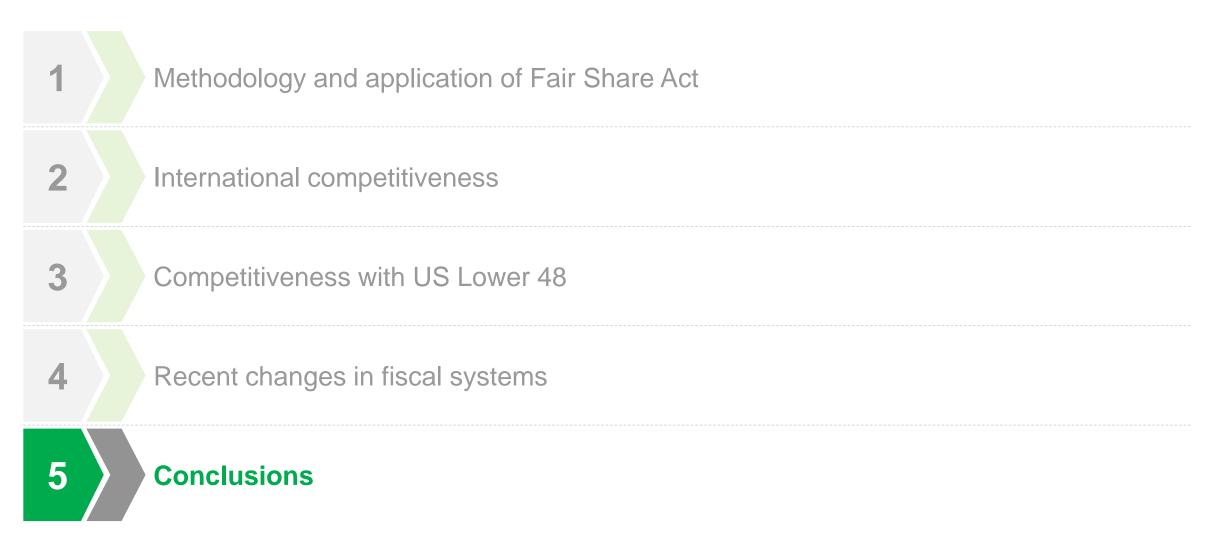
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Most of the jurisdictions in the peer group improved fiscal terms since the 2014 oil price crash



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Conclusion

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