

Managing natural resource funds: global trends and practices

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The growth of new SWFs

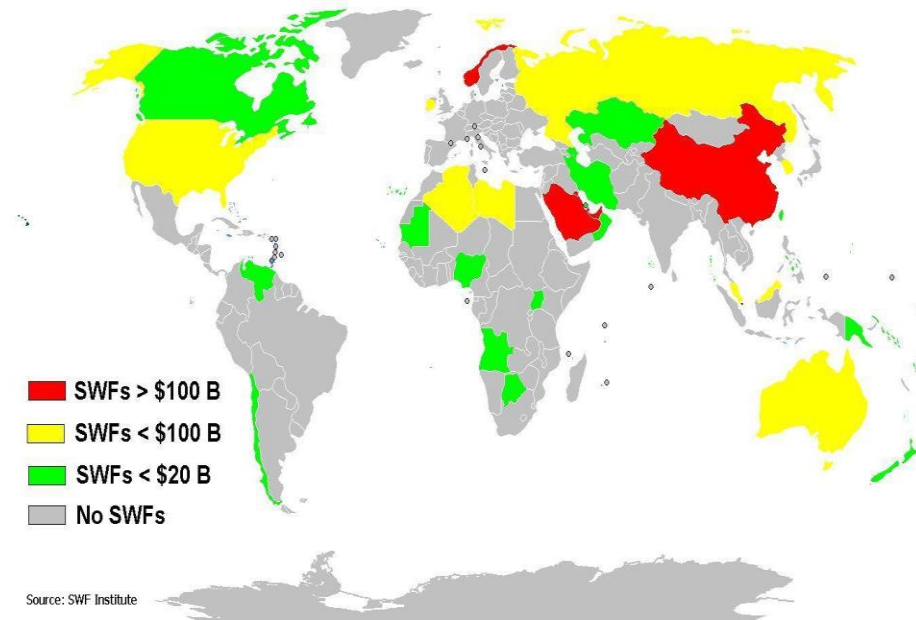
A number of very established, large funds (the “top 8”)

- Proliferation of new funds since 2000 (resource boom)

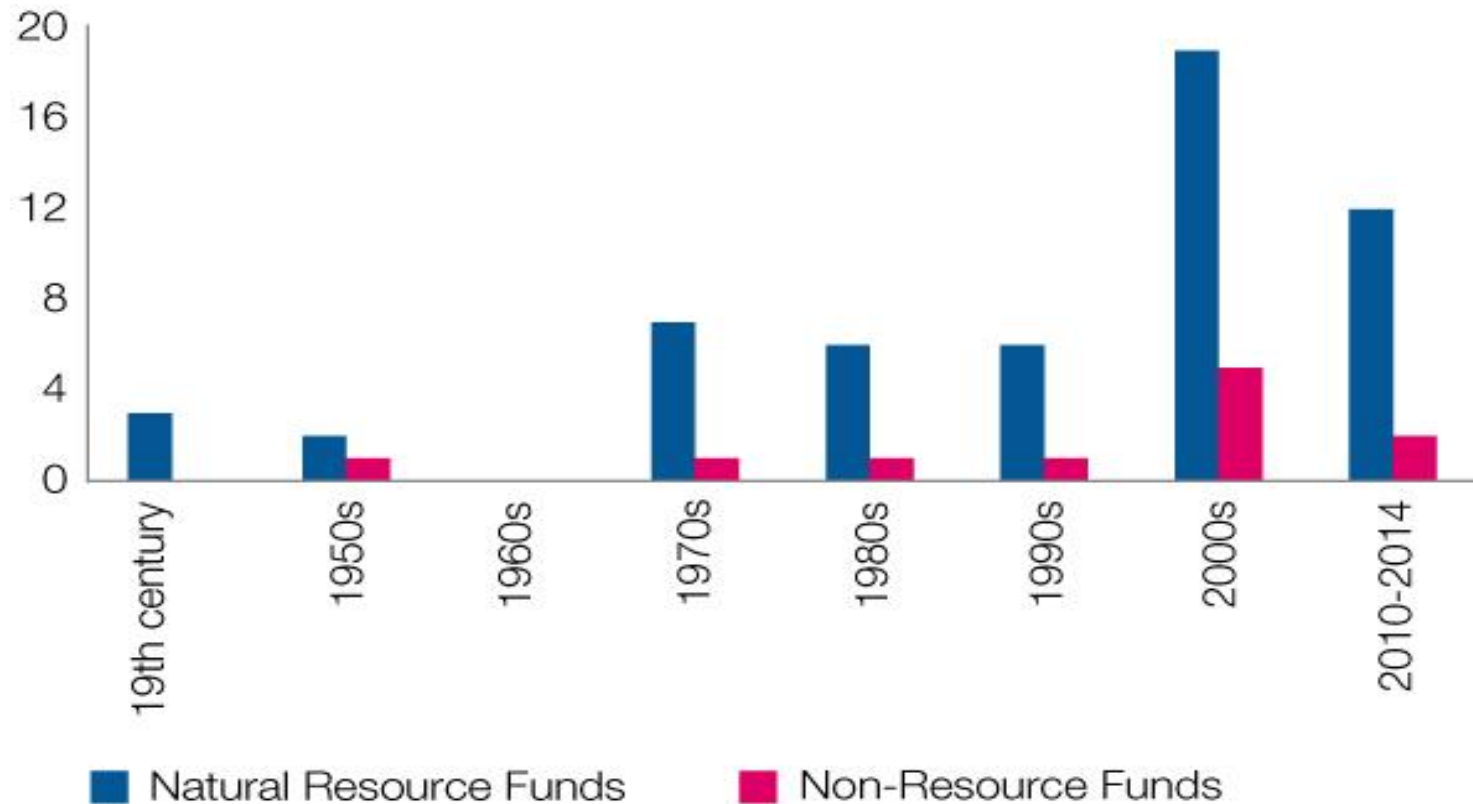
The sovereign investor universe

- Stabilization funds
- Savings funds
- Investment income funds
 - North American permanent fund model (since 1850s)

“Sovereign” includes a number of sub-national governments



The growth of new SWFs



Major global trends: the context

Its all about the fiscal framework

- Rules and mechanisms for funding and withdrawals
- Every single SWF in the world is going through this

We moved from SWFs 1.0 to SWFs 2.0 over the past decade

- Now moving on to SWFs 3.0

SWFs 1.0

- Early adopters in resource-dependent jurisdictions
- Various waves of adoption in resource-dependent jurisdictions
- Very simple investment models
- Focus on saving (often a political compromise)

Major global trends: the context

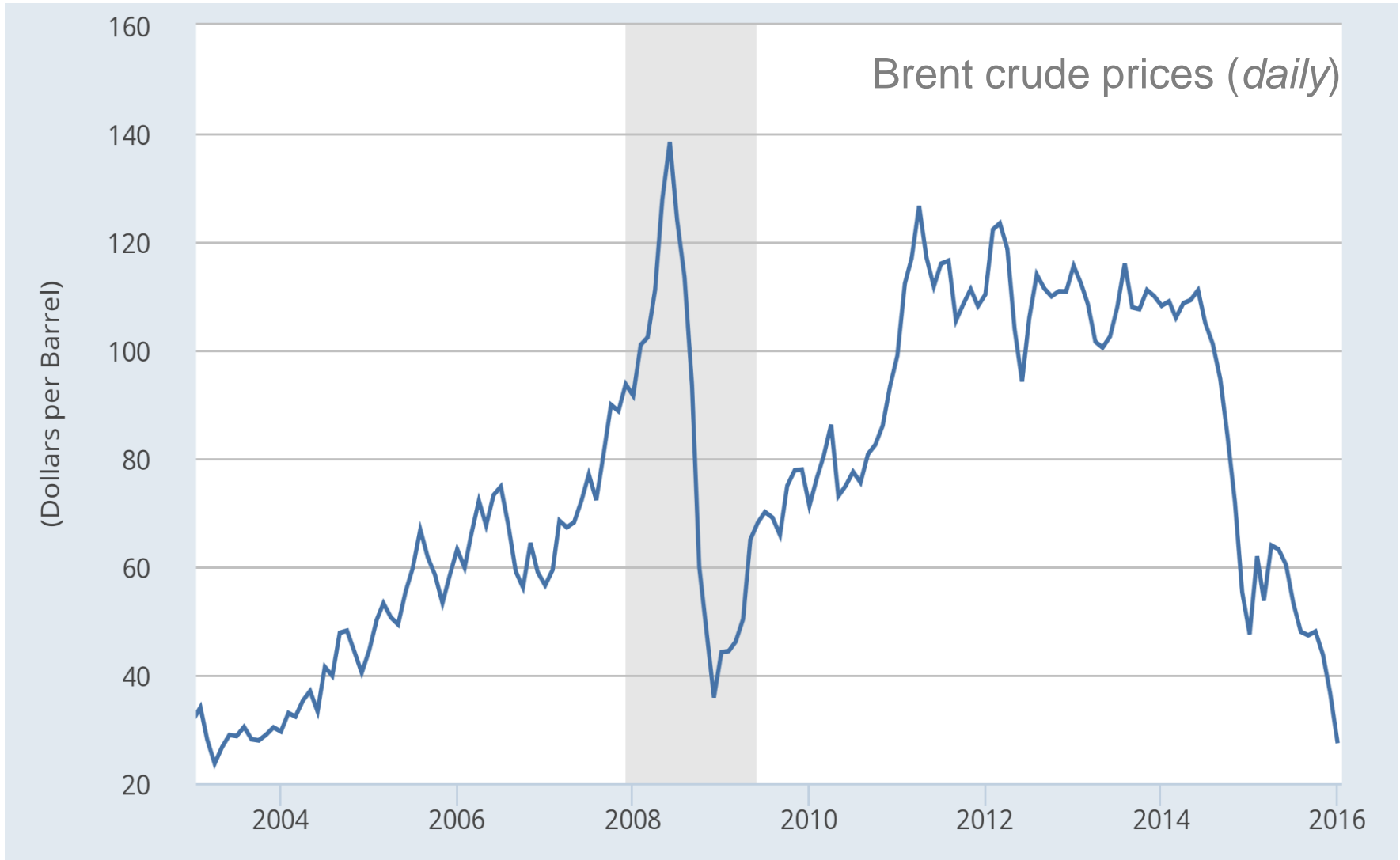
SWFs 2.0

- Growth (in number, size and prominence from 1998-2014)
- Buoyed by rising commodity revenues (and in Asia, trade surpluses)
- Healthy financial returns

SWF model goes mainstream

- Broad consensus on benefits of SWFs
- Creation of the International Forum of Sovereign Wealth Funds
- Reduced political pressure
- Much more analysis and research

And then...this happened



SWFs 3.0: Adjusting to new fiscal realities

SWFs 3.0 era underlines the importance of “cyclically robust” savings and spending mechanisms

- Old rules of thumbs are one-sided, work fine when running surpluses
- Norway, Abu Dhabi and Chile are rare exceptions

Focus for resource-based SWFs is now on:

- Avoiding depletion of assets (unless constitutionally protected)
- Decoupling saving/spending from commodity cycle

An ebbing tide reveals who has been swimming naked

- Not all SWFs are all they're cracked up to be

SWFs 3.0: Adjusting to new fiscal realities

Are the rules appropriate for both boom and bust times?

Smarter countries are not resting on the laurels

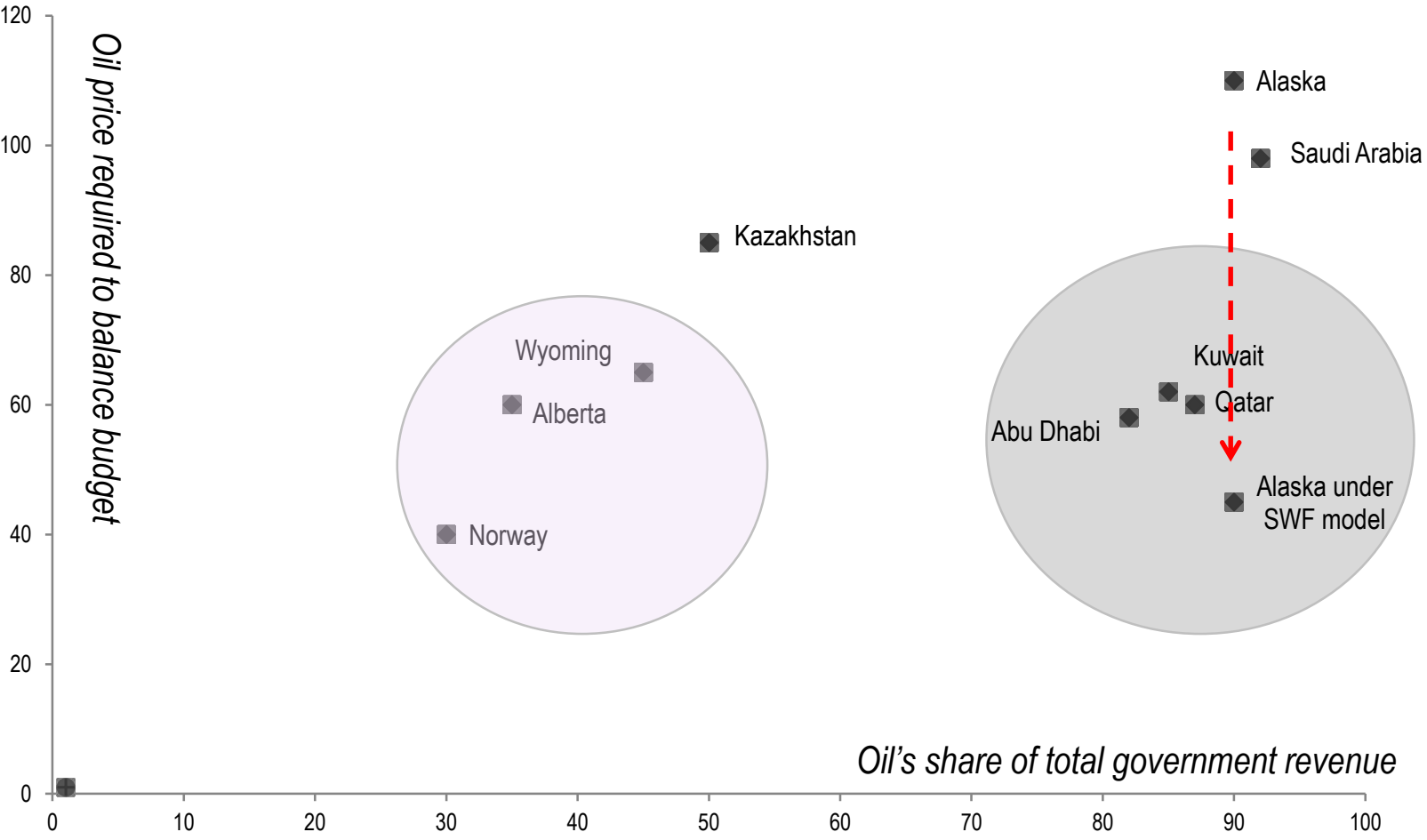
- Group A: never saved enough (Venezuela, Nigeria)
- Group B: depleting now (Russia, Saudi Arabia)
- Group C: reforming saving and spending rules (Abu Dhabi, Kuwait, Norway, *potentially* Saudi Arabia)

Despite all the pressure, “voting with feet” for SWFs

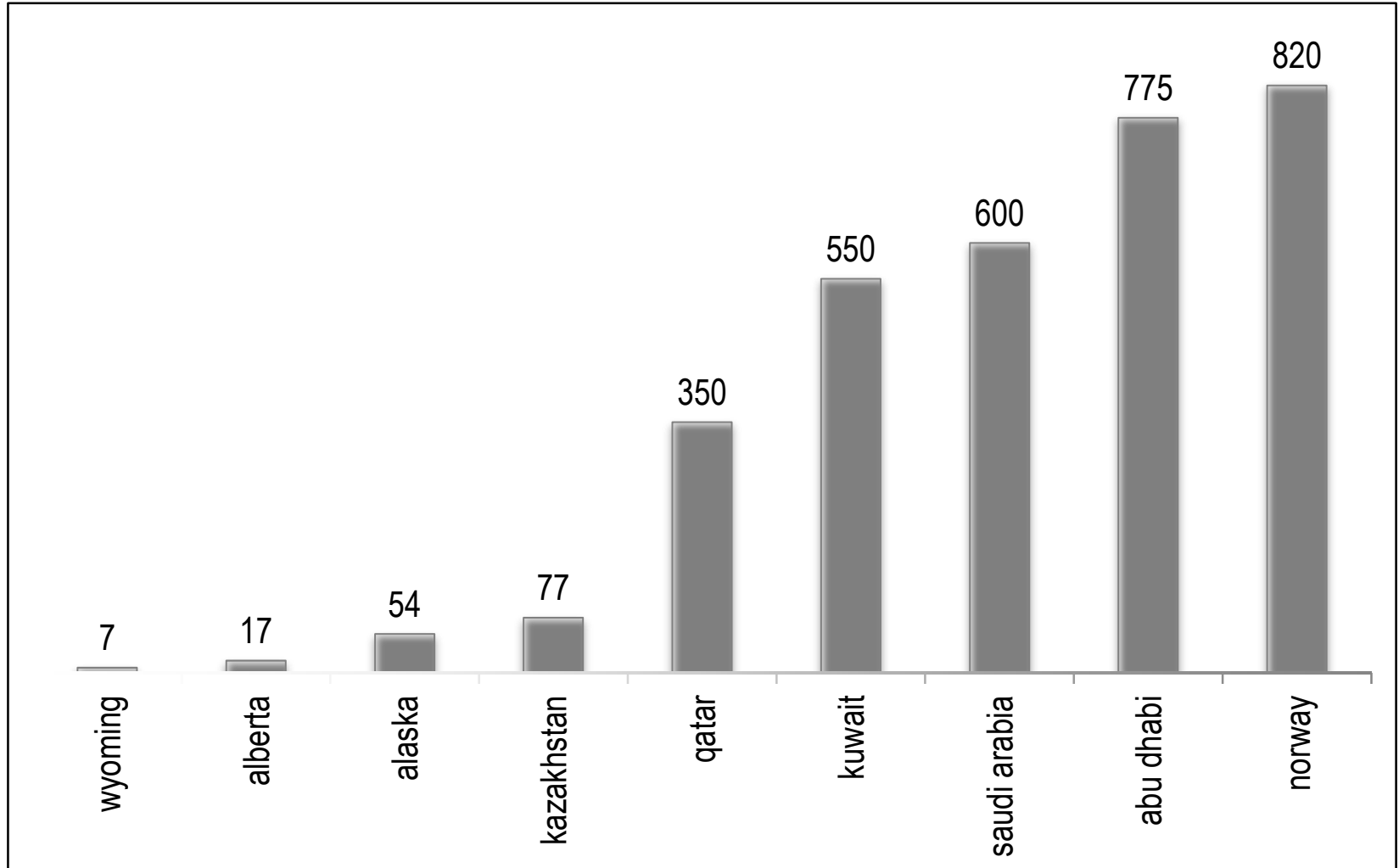


The Alaska situation: an outside perspective

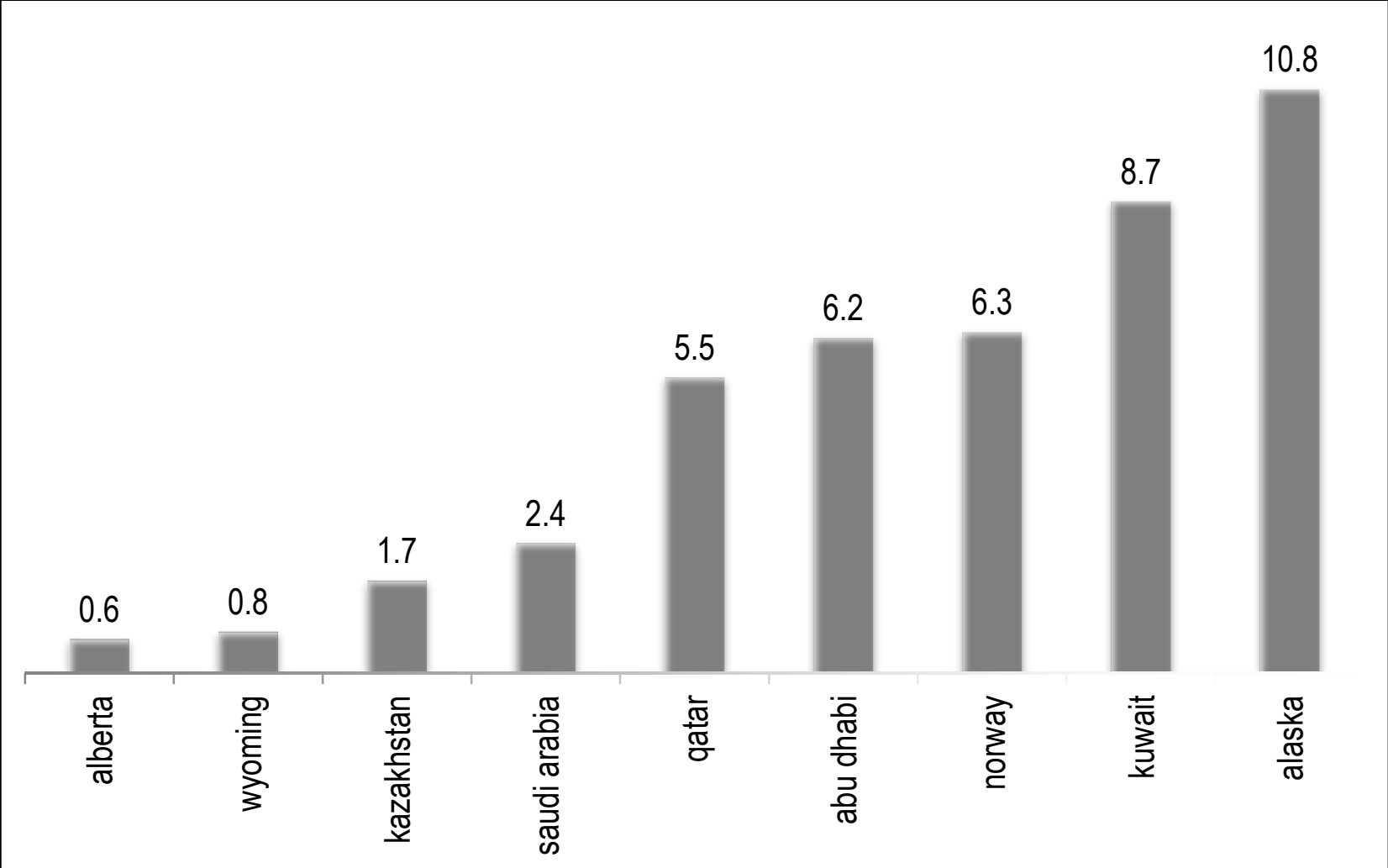
Oil's % of revenue & fiscal break-even price



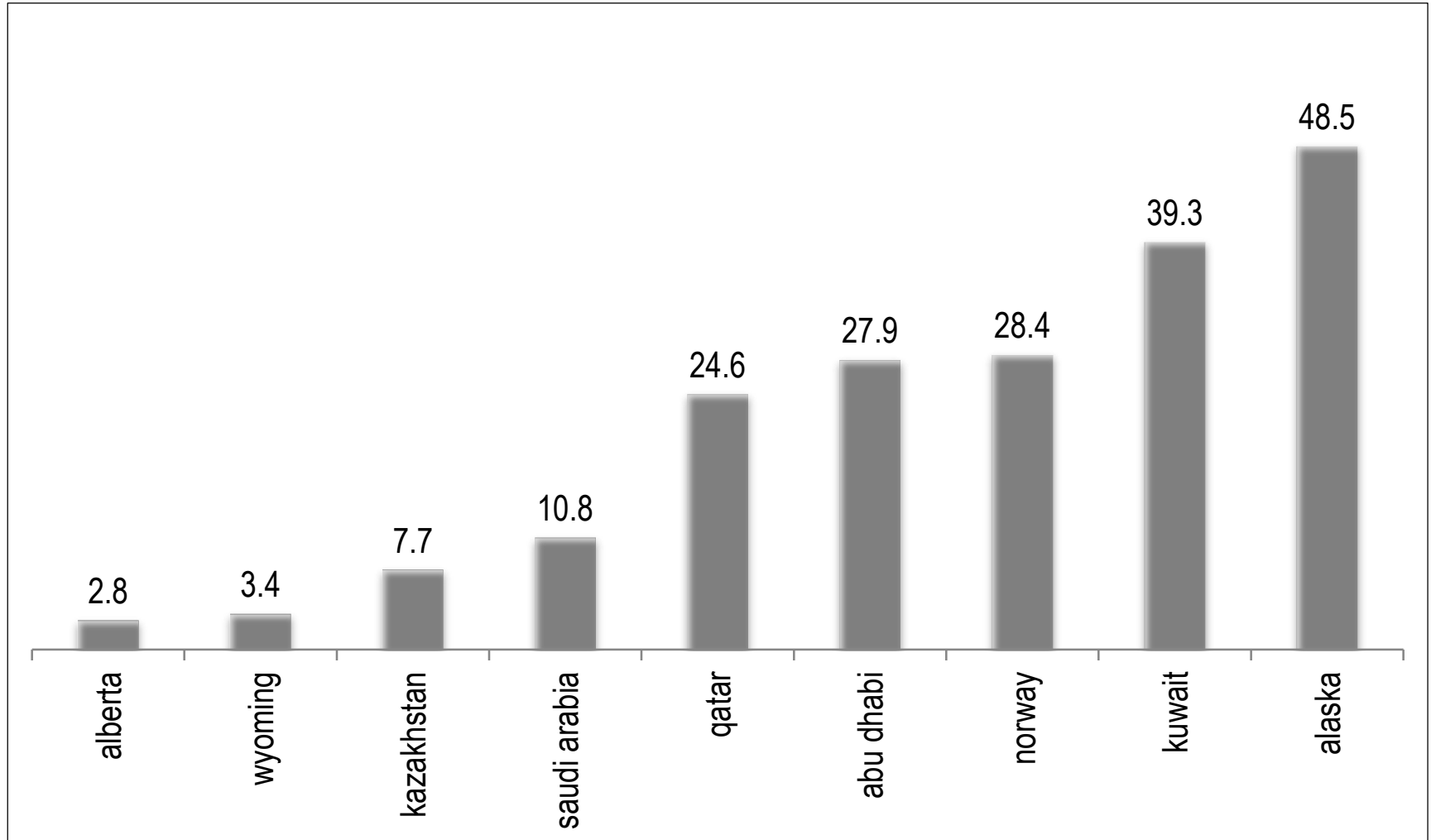
SWF assets under management



Size of assets relative to budget



Notional sustainable draw as a % of budget



Note: sustainable draw assumed to be 4.5% per annum

Alaskan strengths and weaknesses

	Like	Dislike
Size of savings	✓✓✓	
Size of accessible buffers		XX
Fiscal dependence on oil		XXX
Existence of saving rule	✓	
Appropriateness of fiscal rule		XX
Prospects for raising non-oil revenue (long term)	?	
Prospects for raising non-oil revenue (near term)		?
Long-term viability and profile (production)		XX
Fund governance structure and independence	✓✓✓	
Fund investment style (relative to mandate)	✓✓	
Support for fund staffing needs		XX



The sustainable SWF model: key aspects

What are resource-based SWFs really about?

The most disadvantageous lottery in the world
Adam Smith

Saving

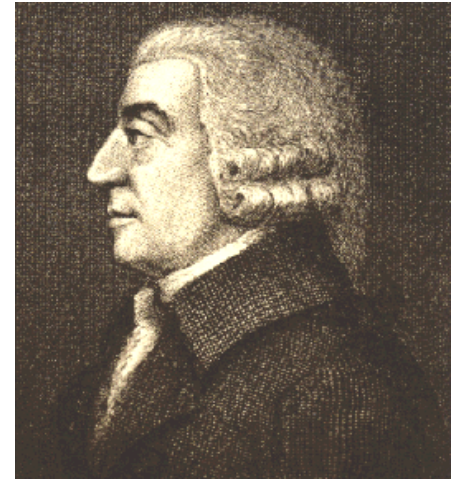
- Transforming a depleting asset & income stream
- Unmanageably large windfall

Macroeconomic and fiscal stabilization

- Decoupling spending from commodity cycle
- Volatility moves from the budget to the funds

Preventing waste and bad investments

- Boom-bust cycle, with “absorptive capacity” constraints
- White elephants



Oil to equities

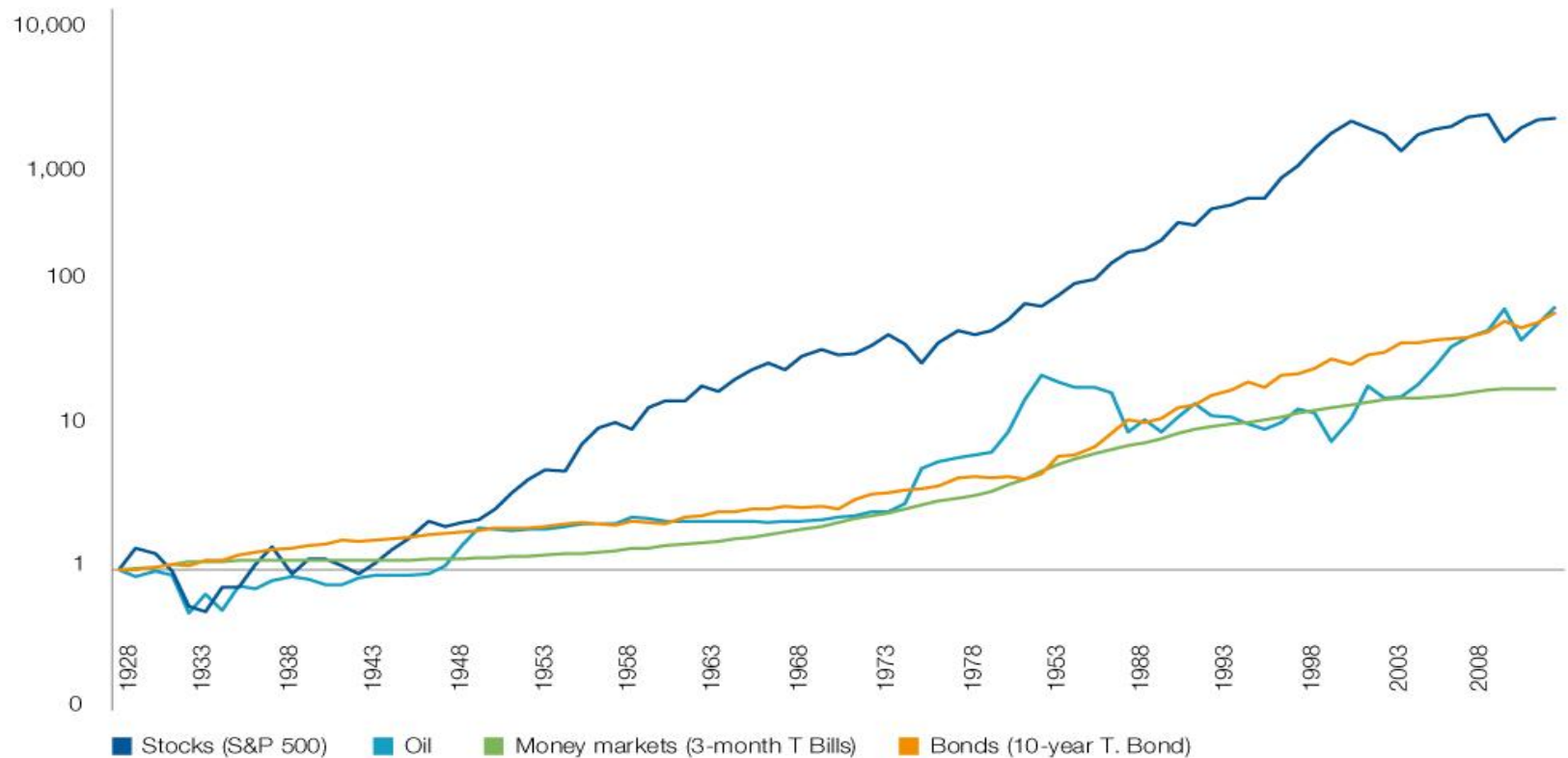
Financial assets have had much better risk-adjusted returns than oil, historically

- Oil: the risk of stocks, with the return of bonds
- Even more compelling when you think of total wealth into a portfolio

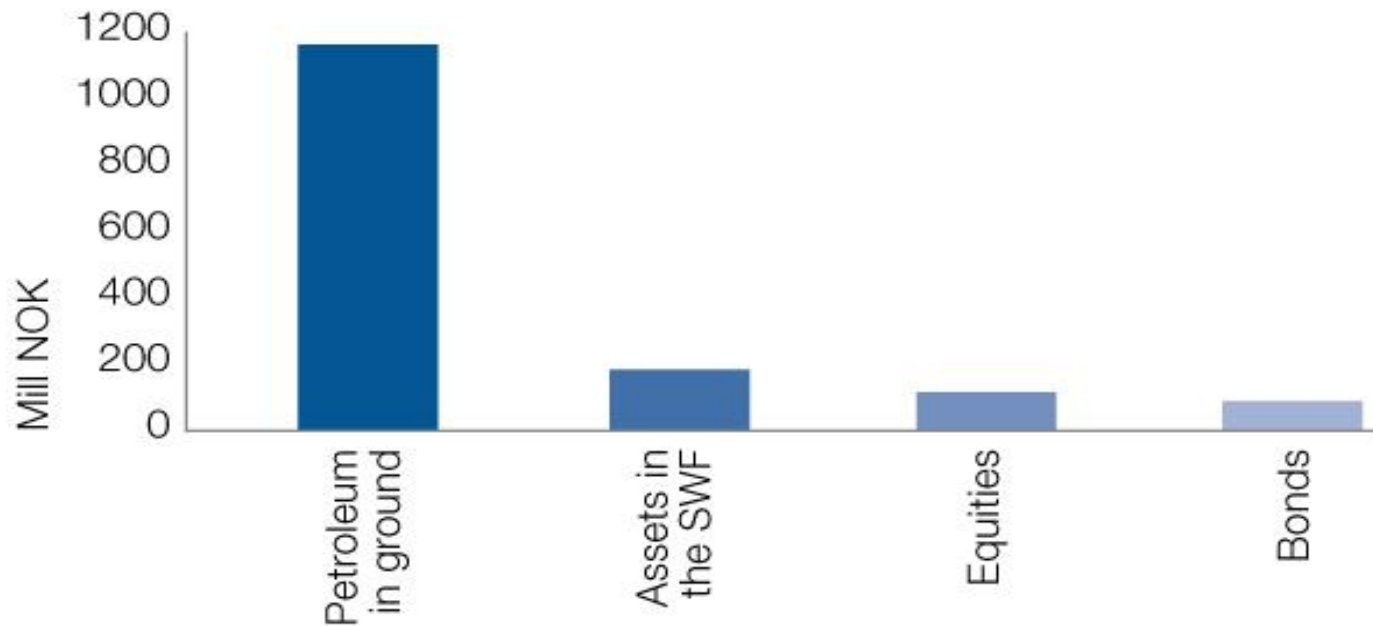
Transforming resource wealth into financial capital has (historically) been rewarded

- Despite having a \$900bn SWF, Norway still holds more wealth in subsoil assets
- That is perceived as a massive national risk

Oil to equities: what would you rather hold?



Oil to equities: what would you rather hold?



Key elements of a rule-based SWF model

Saving rule: how much to transfer to SWF, and when?

- Transfer to the SWF in general
- And potentially between stabilization fund (liquid, safe assets) and savings/income fund (illiquid, risk assets)

Spending rule: how much to transfer from SWF, and when?

- Depends to fund's purpose: stabilization, savings and income
- Short-term stabilization, long-term “endowment” income and/or locked-up savings for the future

Why have a rule?

Like all rules, the idea is to constrain discretion

- Particularly in boom-bust oil-rich states, memories tend to be short
- Human ability to forecast oil prices (and revenues) are extremely limited

Fiscal rule is “symmetric” and “counter-cyclical”

- Real, not partial, decoupling
- Constraining spending growth in boom times
- Allowing sustainable, rule-based draws from SWFs in leaner times

Expectation management and credibility of medium- to long-term fiscal policy

- Ratings agencies
- Businesses and investors
- Public



The changing nature of fiscal rules

Existing approaches to rules

Rule-of-thumb measures

- Fixed percentage (for example, 20% of revenues)
- Deviation from moving average (revenue or price)
- Reference-price (above and/below \$75)

Rule-of-thumb measures better than nothing, but...

- Specific problems: procyclicality, setting “right” reference price?
- General problem: these are “accumulation rules”, but not integrated with budget
- Offer inadequate counter-cyclical decoupling

A fiscal rule for resource-based SWFs

Based on Harvard Prof. Ricardo Hausmann's work for resource-rich governments

- Rule expresses critical policy choices around the use of volatile and finite resource revenues
- Finding a balance between spending, stabilization and saving

Model is flexible to different contexts and country needs

- Different revenue scenarios, assumptions and shocks
- Different assumed SWF returns and volatilities
- Spending rates
- Dynamics: spending now versus the future

Harvard research



Fiscal rules for resource-based SWFs

- Rule of thumb measures: suboptimal (ie. Alaska)
- Better to have an integrated, dynamic and rule-based framework

Model

- Rule-based framework for savings, spending and stabilisation

Governance and implementation

- Rules for resource-based SWFs
- The role and structure of the board
- Institutional positioning: arm's length independence, the central bank model, etc.

Intuitive overview

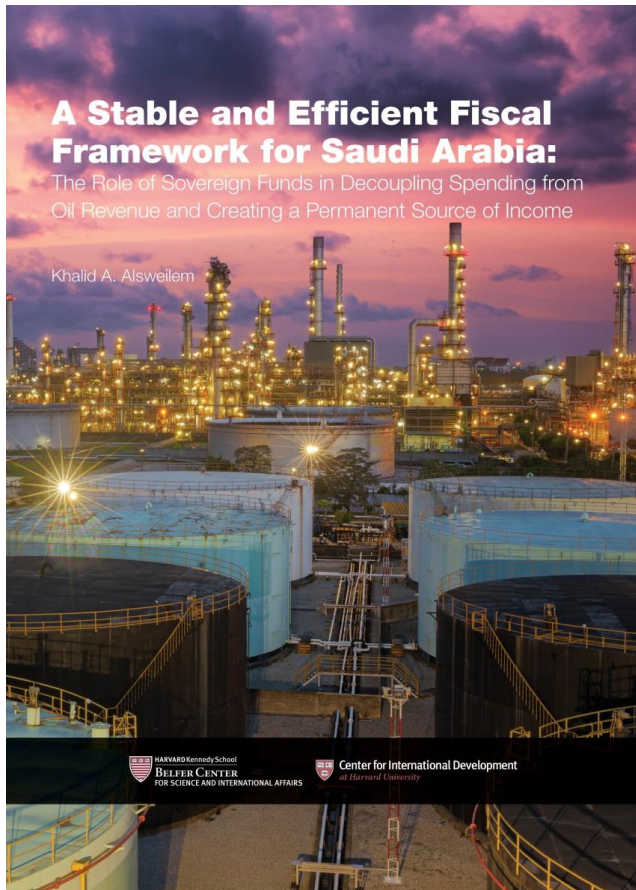
Several conceptual departures from rule-of-thumb approach

1. Resource revenues flow first to the fund, then via a rule-based spending policy, to the budget;
2. The fund – rather than the budget – bears the “burden of adjustment” to positive or negative oil-revenue shocks;
3. Spending is decoupled from annual oil-revenue volatility
4. Rule ensures that spending only adjusts partially and with a lag, via a change in the level of the fund:
 - NOTE: this holds for positive and negative oil price shocks



The Saudi Report: a more detailed look

Saudi Arabian report



The basic economics (starting point)

- World's largest oil producer
- Decades of (cheap) oil reserves
- \$850bn in reserves

What on earth could go wrong?

- Oil dependence: high and rising
- Volatility in revenue and capital spending
- Reserves at risk: rising breakeven
- Uncertain long-term oil-revenue trends
- Rising long-term spending pressure

Assets accumulated is *ad hoc*

- Spending and saving decisions not anchored by a rule-based framework

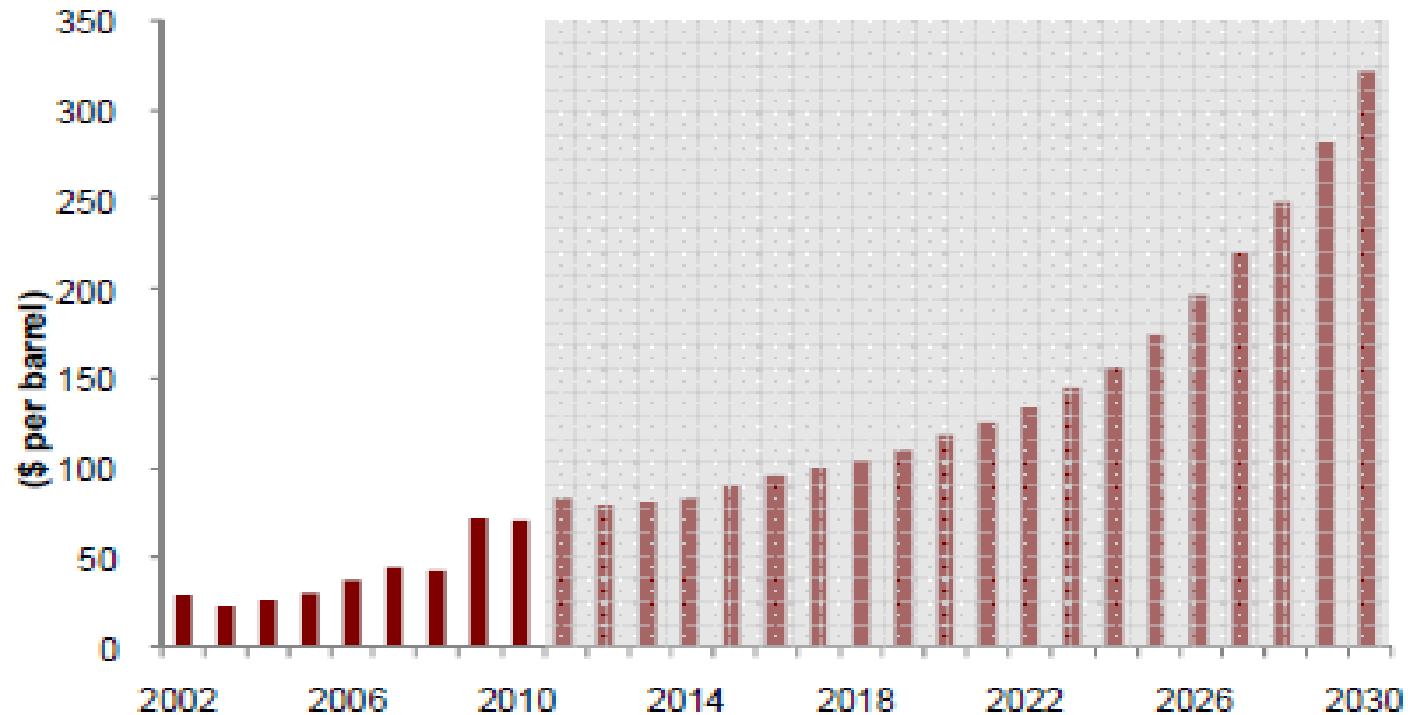
Saudi Arabia's problems: lessons for Alaska?

COUNTRY	ESTIMATED OIL PRICE REQUIRED TO BALANCE 2015 BUDGET
Norway	\$40
Kuwait	\$54
Abu Dhabi	\$55
Russia	\$105
Saudi Arabia	\$106
Nigeria	\$122
Iran	\$131
Algeria	\$131
Venezuela	\$160

Sources: International Monetary Fund (2014b), except for Nigeria, Russia and Venezuela (Deutsche Bank, 2014) and Norway (Fitch Ratings, 2014).

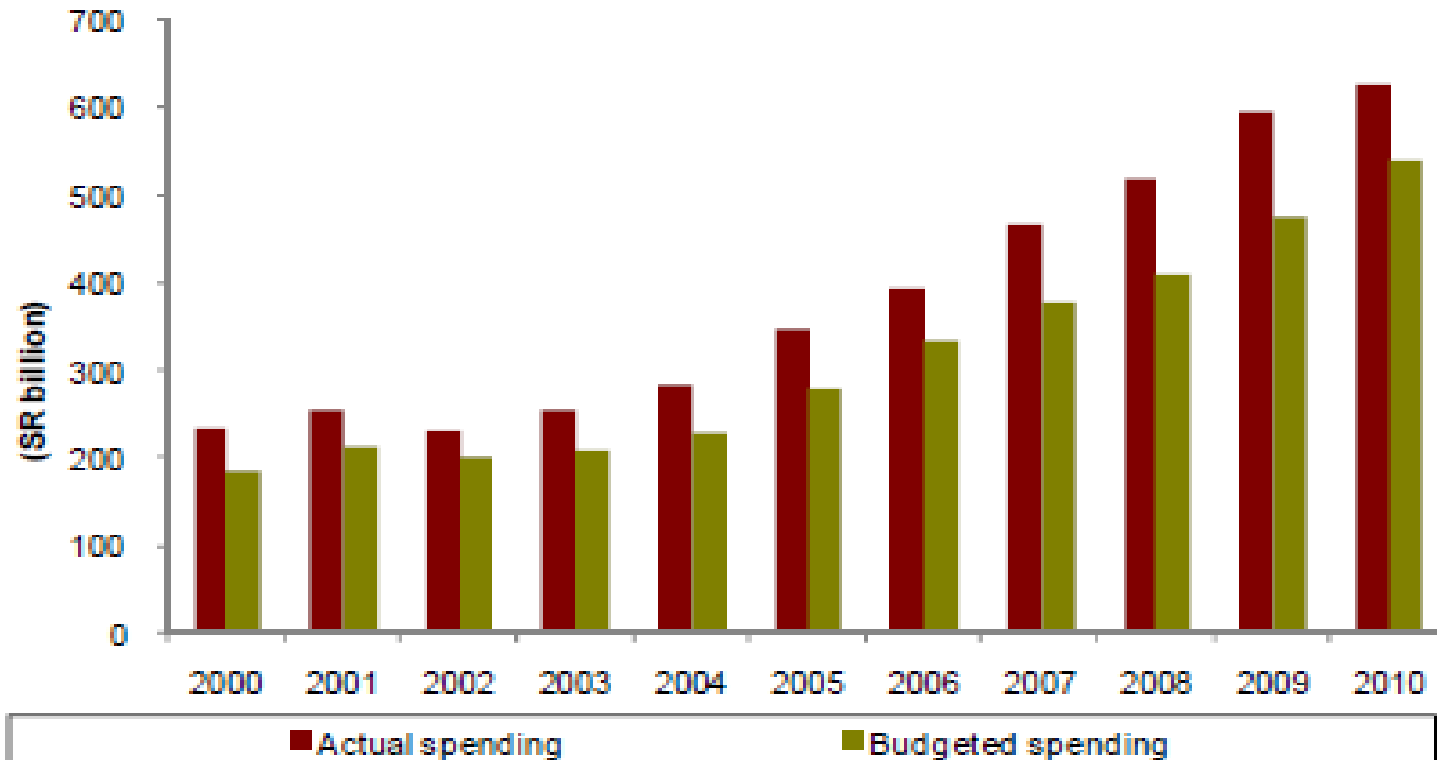
Saudi Arabia's problems: lessons for Alaska?

Projected breakeven oil price
(Saudi export crude; forecasts in shaded area)



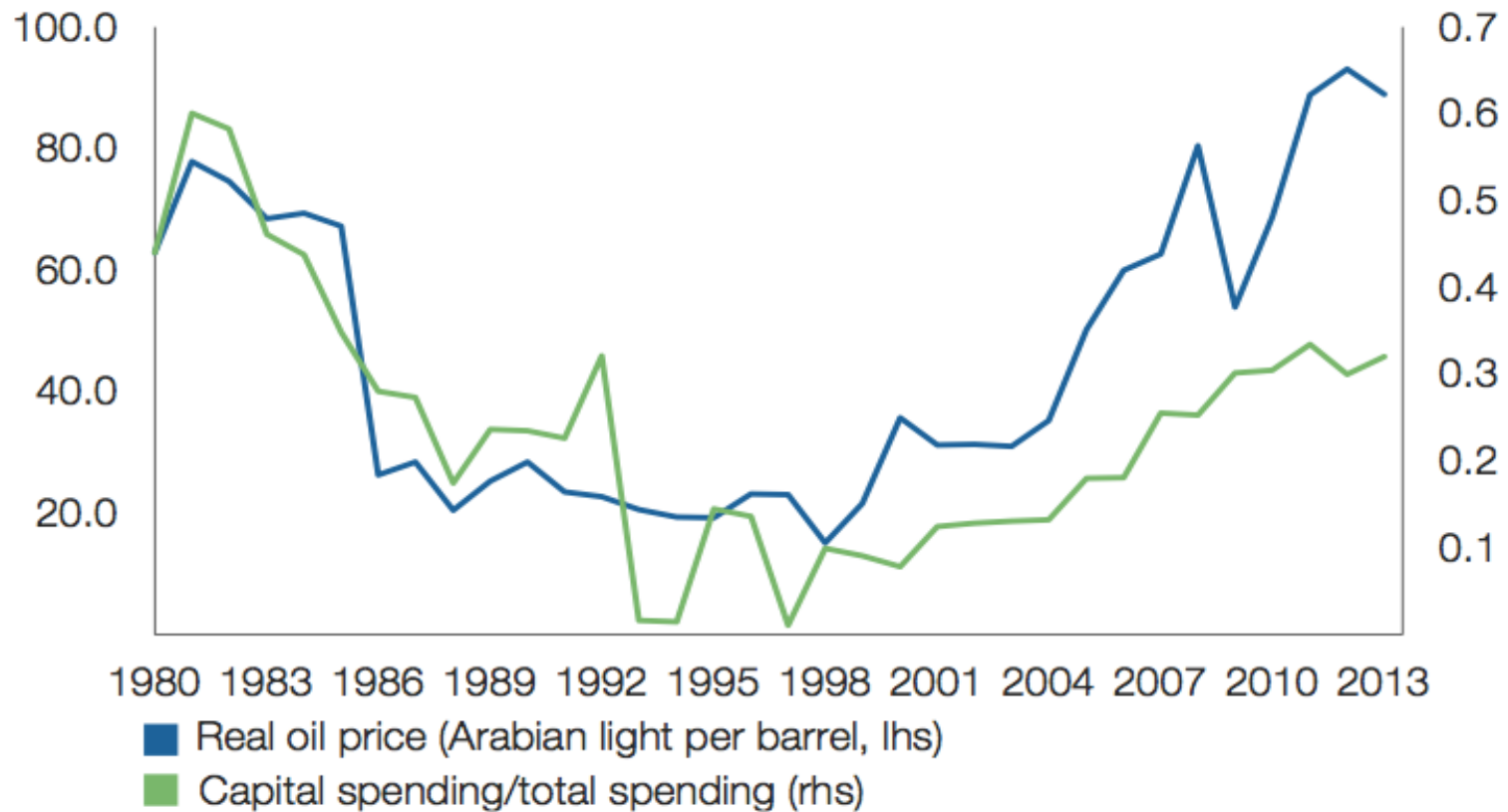
Saudi Arabia's problems: lessons for Alaska?

Budgeted and actual government spending



Saudi Arabia's problems: lessons for Alaska?

Oil-driven cyclicality in capital spending



Policy recommendations: Saudi Arabia

Establishment of savings and spending rule

- Under the jurisdiction of the Supreme Economic Council
- Modelled impact of specific fiscal rules on Saudi government finances
- Key message: don't delay further...delays are costly (have already been)

Proposed the formalisation of two sovereign funds

- Stabilisation Fund: with \$250bn in initial capital
- Saudi Future Generations Fund: with \$500bn in initial capital

Suggested governance arrangements for both funds

- Stabilisation to remain with SAMA (central bank), reporting to MoF
- Future Generations Fund to be managed by new entity, with:
- Governing Council: Supreme Economic Council
- Board of Directors: independent, fixed-term appointments
- Management authority: led by Senior Executive

Implications for Saudi energy policy

- Royal family and key ministers convinced US shale is a flash in the pan
- Always been much more concerned about Iran and Iraq production increases



Implications for Saudi energy policy

Willing to engage in all-out price war to regain market share, no matter the fiscal cost

- Deeply scarred by past episodes of uncoordinated OPEC policy
- Have enough gas in the tank to handle a 2- to 3-year oil slump

Burn through reserves, cut capital spending and raise debt

- Rather than cut production and be the swing producer of old
- Already gone through \$150bn in previously-accumulated reserves
 - Most recently: sale of parts of Saudi Aramco