

2015

A DIVERGING WORLD: OUTLOOK FOR THE GLOBAL ECONOMY AND INDUSTRIES IN AN UNCERTAIN ECONOMIC ENVIRONMENT



Diverging Paths Amidst Uncertainty

- Between October 2014 and January 2015, oil prices collapsed 50%, with dated Brent price per barrel falling from \$97.3 to \$48.7. The compounded the effects of the Dollar, which had already begun its rise in global currency markets.
- Budgets of many companies were set in the Fall of 2014, prior to these historic changes.
 While some are scrambling amidst outdated budget assumptions, others are rushing to seize newfound opportunities. Complicating matters is the potential for prices to remain low for several years.
- Low oil prices can't be viewed in isolation. Oversupply and weak Chinese demand are
 placing downward pressure on other commodity prices as well, which change the
 profitability of many operations in the short and long term.
- Various segments of the oil industry are obvious losers from these conditions. But where there are losers, winners emerge with improved margins and new growth opportunities.
- Beyond macroeconomic and industry changes new risks emerge as oil producing nations struggle with low revenues. Social unrest, capital flight and economic policies will alter the security landscape and political engagement within foreign markets. These actions will be critical to business success.



Study Outline

IHS is developing a comprehensive scenario analysis that will evaluate the new opportunities and risks, winners and losers, across multiple industries and global markets.

This comprehensive study will be delivered in four modules. *Each assume a sustained period of low oil prices.*

Those modules include:

Module 1 – Macroeconomic Simulations

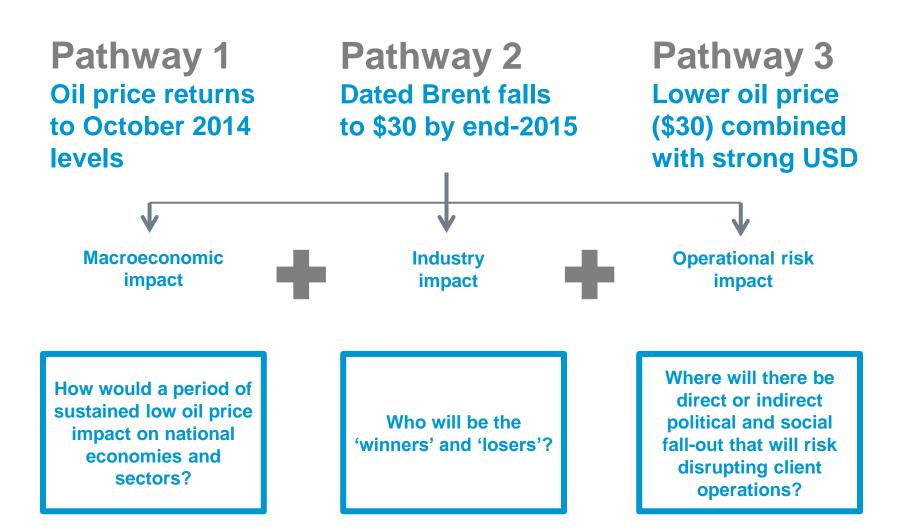
Module 2 – Industry Sector Simulation

Module 3 – Assessing Operating Risk

Module 4 – US Regional Simulations

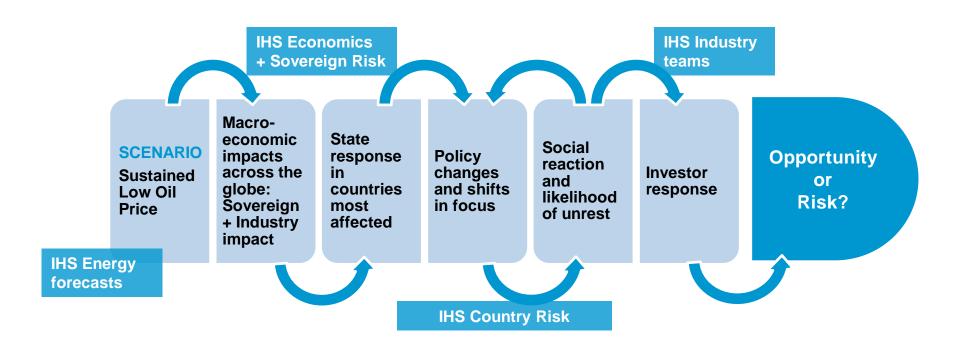
Each Module is summarized on the following slides.

Testing the impact of alternative scenarios for oil price





The study will build on scenarios and forecasts from IHS Energy and IHS Economics and Country Risk



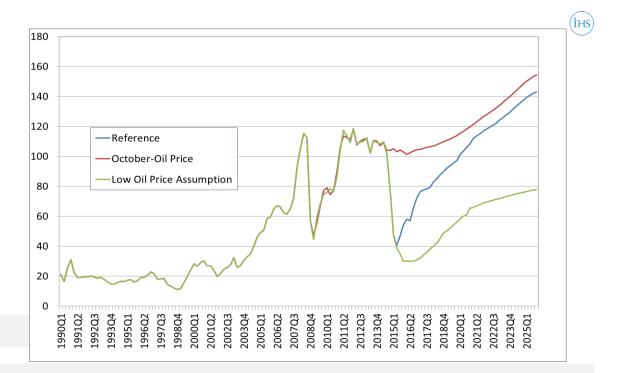


Core benefits?





Module 1: Macroeconomic Simulations Assumptions



Scenarios

Scenario 1: Reference

Reference Scenario: February 2015 Baseline Forecast

Scenario 2: High Oil Price

Impacts using the October 2014 Oil Price Forecast

Note: This was the price under which many annual budgets were set.

Scenario 3: Low Oil Price

Dated Brent falls to \$30 by end-2015 and rises very slowly thereafter.

Other commodity prices will be adjusted including: WTI, Gas in NA, Europe and Asia, Coal and Electric; Aluminum, Copper, Iron Ore, Nickel, Wheat, Corn, Rice, Cotton, Cocoa, etc.

Scenario 4: Strong Dollar

Built on Scenario 3, we assume lower oil prices exacerbates movements in exchange rates, causing a significantly stronger appreciation of the US\$.



Macroeconomic Module: Table of Contents

- I. Global context and justification of the four scenarios
- II. Consequences on world growth and inflation
 - World total and then by region
 - The "reference" scenario in all cases will be the Feb baseline
- III. Impact on key balances (balance of payments, public finances)
- IV. Winners and losers under each scenario outlook
 - By country
 - By stakeholder:
 - Consumers
 - Companies
 - Government

Setting the Scene

Although low oil prices mean good news for consumers and energy dependent producers, they negatively impact many stakeholders.

Commodity producing countries see budget and trade balances worsen and FX reserves shrink, which threaten growth, exchange rates and external financing.

In some markets, this will lead to social disorder, political instability and mounting insecurity.

Energy producers whose budgetary balances depend on high oil prices will have to make painful adjustments to fiscal policies.

Energy importers whose investments in renewables relied on persisting high oil prices may slow or delay their plans.

Exchange rates will react, with some countries experiencing an appreciation of their currency and others a depreciation.

This results in potentially major changes in capital allocation and FDI, and mounting financial stress.



Module 2 – Industry sector simulations

Using the IHS World Industry Service and Global Link Model, IHS will simulate impact on industries and related supply chains.

We will simulate impacts on sector output and pricing power.

This module will illustrate rankings of industry output and impacts of linkages across sectors.

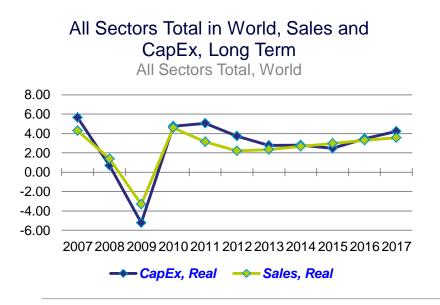
Where are the opportunities for growth and which sectors are more immune?

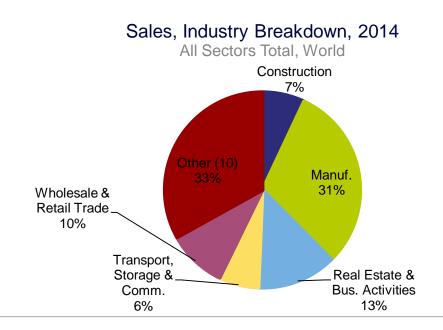
What sectors will be slowing vs. growing and how does that shape your portfolio of customer markets?



Industry Module Analysis: Table of Contents

- Rank of growth prospects over forecast period for industry/sectors
- II. Describe the impact on sector outlooks based on the scenarios
- III. Demonstrate and explain linkages among industries







Module 3 – What will be the impacts for economic and sector development in these countries and political stability more widely? 1. How does the government primarily intend to man

- What pressures will this create on existing governments?
 - How will this influence the next round of decision making? Which decisions are most vulnerable to political manoeuvring?
 - How will this impact political stability overall?

Political considerations

- How does the government primarily intend to manage its deteriorating budgetary position (cut departmental spending, reduce capital investment, raise taxes, issue more debt or print money)? What is the balance between these?
- What will governments with reduced import bills do with freed up finances?
- What political considerations and local influence dynamics will be driving these decisions?

- 4 Which countries and sectors are likely to see investor flight as a result of this?
 - In contrast, which markets will become more attractive and for what types of investments?

Investor Response

Policy Response

Social Reaction

- If consumer subsidies, wages or jobs are cut will this spark protests? How widespread would they become and where would they occur?
 - Will industrial action increase? Where will unrest risks reduce if governments are able to address past concerns through improved budgets?
 - · Will this be targeted primarily at government or also at private operators?

- Which departments are likely to see the deepest cuts or boosts (health, education, defence, social welfare)?
 - Will we see public sector job losses or pay cuts? Or greater emphasis on local content for foreign investments?
 - How will government capital investments be impacted – cuts or accelerated spend?
 - Will tax policy change?

Module 3 – Outputs and Deliverables

For high impact countries we will provide maps of shifting political influence and likely impact on foreign investors.

For each scenario we will adjust our geospatial risk model to provide a differentiated view of risk distribution globally. The scenario-driven geospatial views will enable participating clients to run portfolio exposure analytics for each of the study scenarios.

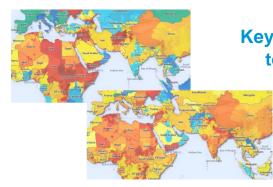
Political Instability hotspots

Security Hotspots

Sector Exposure Hotspots

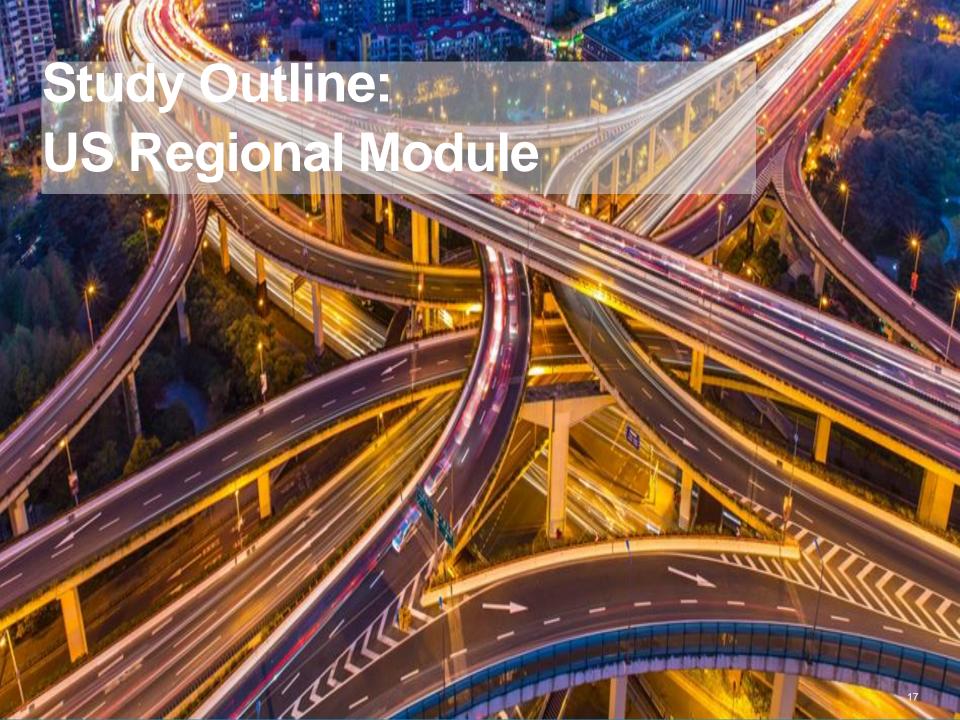


Influence maps for high impact markets to show impact on political stability and policy direction



Scenario-driven impact maps for unrest and political violence

Key sector exposures to political risks by geography



Module 4 – US regional simulations

Low oil prices will have varied impacts across the United States with some regions benefitting more than others. Module 4 looks at these regional variations.

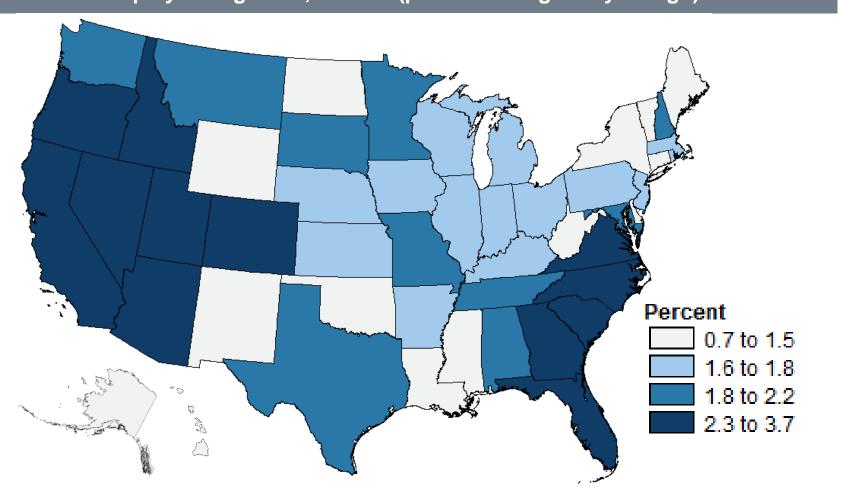
This module provides a full forecast of economic conditions in all US states and metros. The analysis will provide perspective on areas that have experienced the benefits of oil and gas industry investment and spending, as well as those that are not core producing regions.

Which markets will expand and contract across regions, states and metros?



Job growth under each of the macro scenarios will be a key output in Module 4

Employment growth, 2015Q4 (percent change vs. year-ago)





21

What you get?

Core Deliverables for all Modules

Draft & final reports Executive Summary

impact countries

IHS CONFIDENTIAL.

Webcast presenting key findings & participant discussion with study experts

Specific deliverables by Module

Module 1 - Macroeconomic simulations

10-year global and country forecasts for core indicators including growth, inflation and exchange rates Indicators of fiscal and monetary situations Impacts on investment and consumer related sectors Report narrative highlighting results from the scenario Scenario data in XLS and PPT formats

Module 3 – Assessing operational risk

Report narrative including a baseline risk assessment as well as alternative views and indicators for political stability, sovereign risk, security, financial risks Scenario impact maps Exposure analytics by risk type and asset for high

Module 2 - Industry sector simulations

10-year forecasts for selected sectors on a global basis Focus on supply chains and end markets for key sectors, including energy, transportation and technology

Report narrative ranking industries and sources of growth; identified linkages with IHS macro-economic forecasts and industry verticals

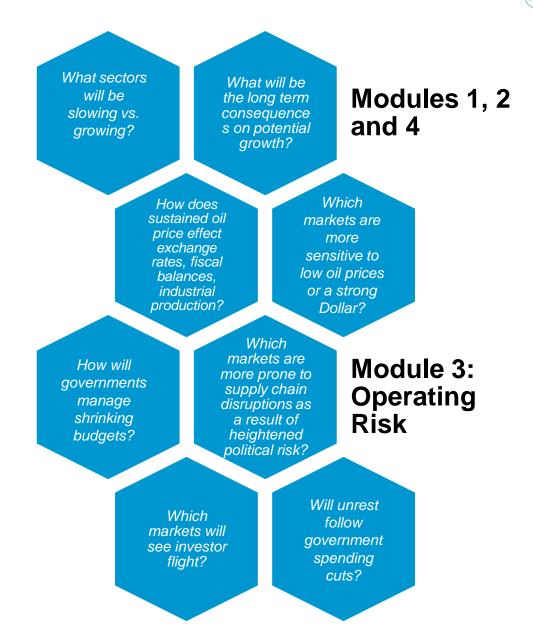
Module 4 – US regional simulations

5-year forecasts for selected sectors across 50 states, District of Columbia, and 363 metropolitan areas Key concepts include changes in sectors' industrial production, employment and income Report narrative highlighting delta between baseline and alternative scenarios Relevant tables and graphs in XLS and PPT format





Key Questions Answered





How the IHS Diverging World Study helps Solve these Complicated Problems

