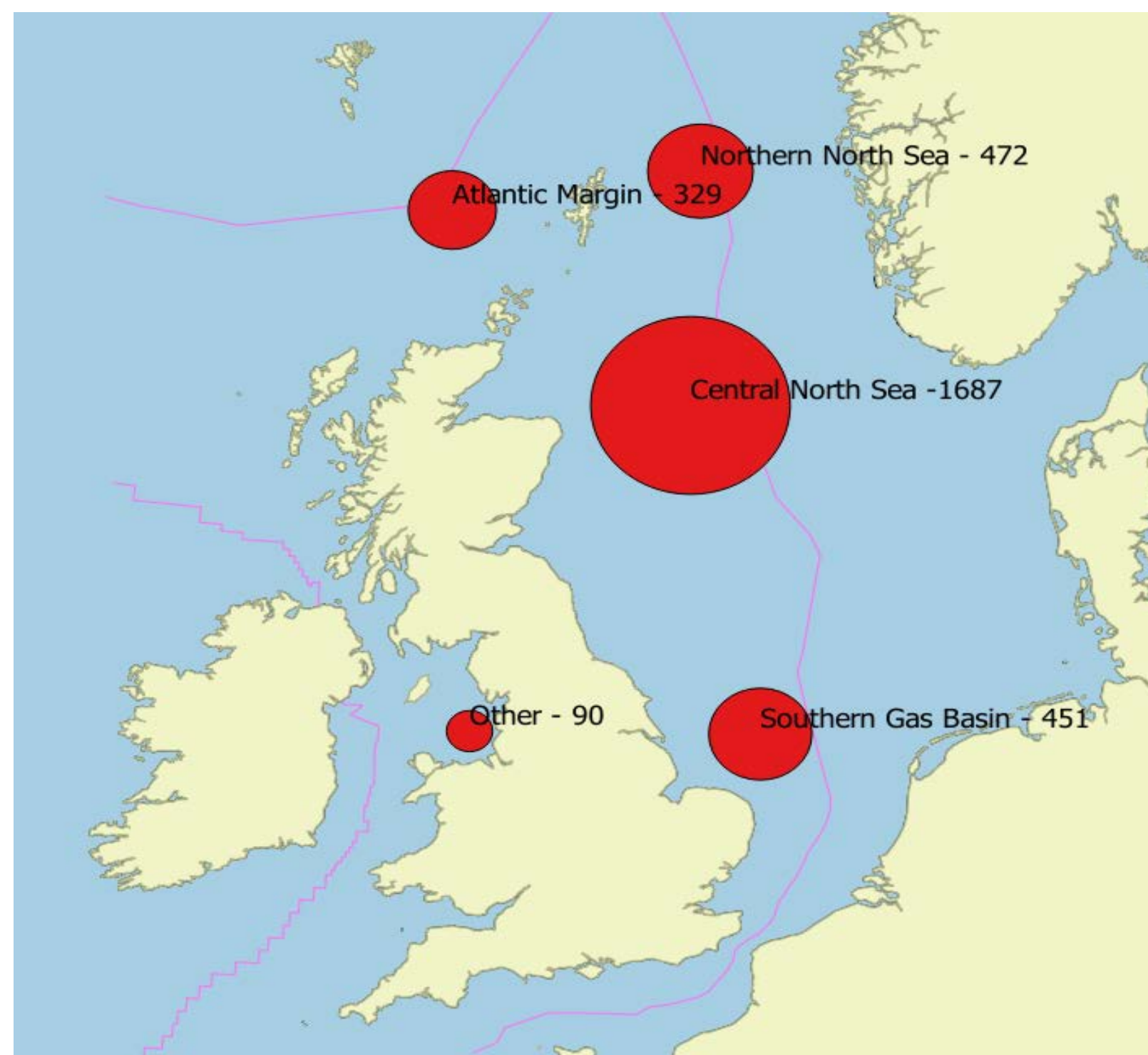


Title Economic Analysis and Fiscal Policy Implications and Their Potential Exploitation in the UKCS

Name: Joshua Ijeh

INTRODUCTION

- The UKCS is one of the most experienced regions in the world. Produced 43.5 billion BOE and around 12-24 billion BOE remaining.
- More than 3 billion BOE remain in approximately 350 unsanctioned discoveries each containing less than 50mmBOE.
- Improving the ability to exploit the potential of untapped small pools could offer a new lease of life to the UKCS including the supply chain.



METHODOLOGY

- Deterministic modelling using a set of representative small pools including sensitivity analysis producing tornado diagrams
- Monte Carlo uncertainty analysis
- GIS Modelling using Wood Mackenzie database

ASSUMPTIONS and INPUTS

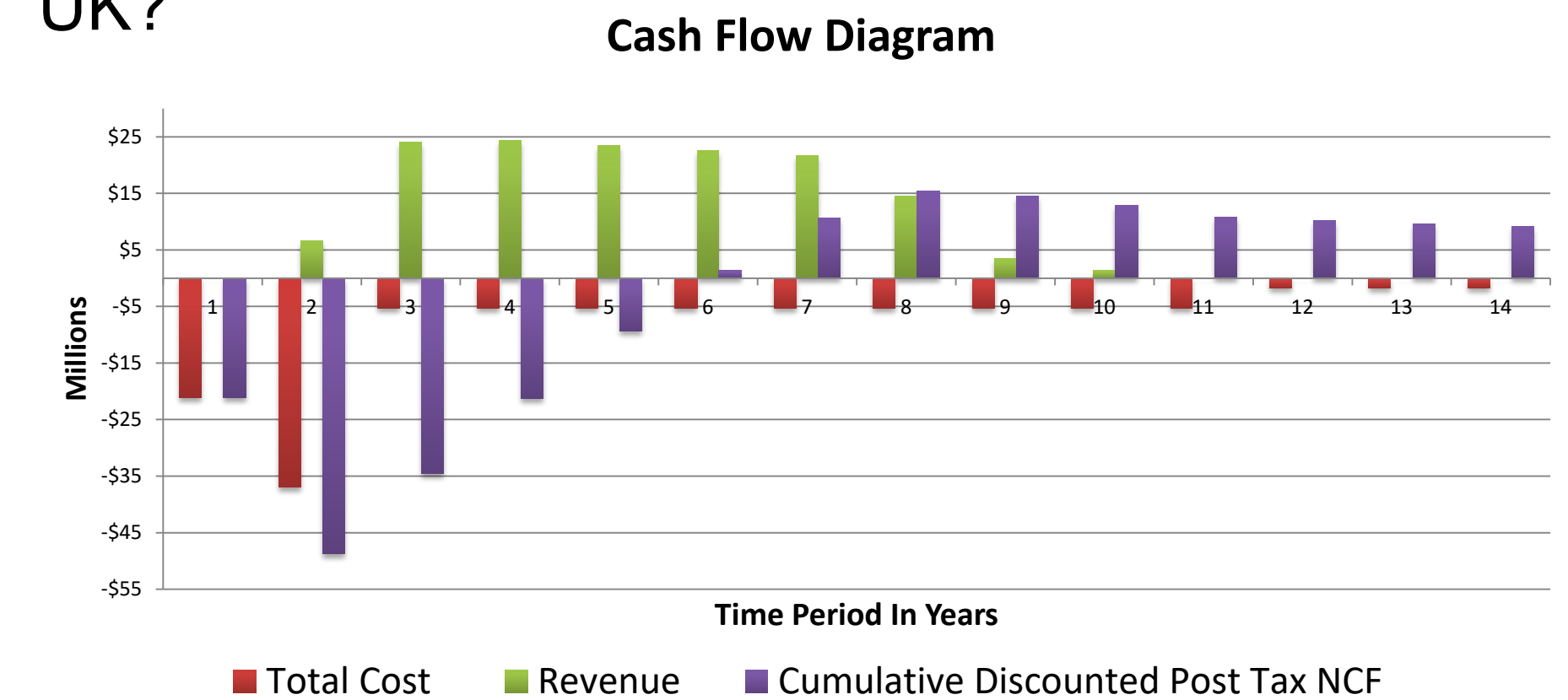
	Maria	Base Year	2017
Field Size (mmBOE)	2.61	Investment Allowance (Against Supplementary Charge)	62.5%
DEVEX (\$mm)	52.73	Oil Price in Base Period (\$ per Barrel of Oil Equivalent)	\$50
OPEX (\$mm)	52.99	Inflation rate	2%
Unit Development Costs (\$/BOE)	20.2	Real Discount Rate (Industry Norm)	10%
Unit Operating Costs (\$/BOE)	20.3	Tax Rate-RFCT	30%
Accumulated Costs (\$mm)	105.72	Tax Rate- Supplementary Charge	10%
Decommissioning Costs (\$mm)	5.2		

RESULTS

Present Value		
Pre Tax NPV (million)	\$ 11.96	£ 9.21
Post Tax NPV (million)	\$ 9.14	£ 7.04
Government Tax Take	\$ 2.82	£ 2.17
NPV/I	0.18	
Simple Payback Year	4	2021

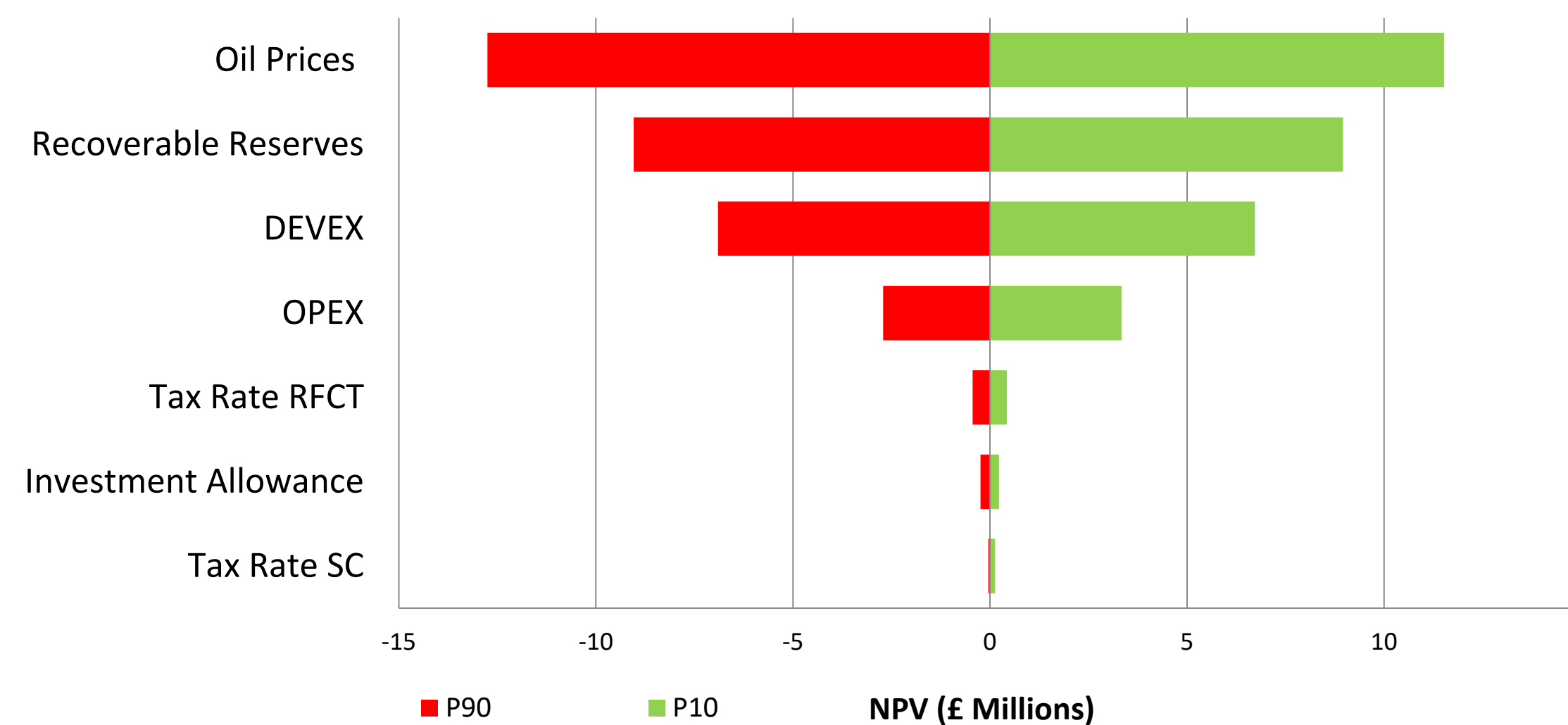
RESEARCH QUESTIONS

- How can the economics of small pools be improved in the UKCS, regarding reductions in DEVEX/OPEX, increases Oil/Gas Prices and Tax Changes?
- What are the major risks to small pools development and barriers preventing the industry achieving MER UK?



Sensitivity Analysis identified Oil prices, Reserves and DEVEX/OPEX as the most influential to returns. RFCT has more effect than SC

Tornado diagram



CONCLUSIONS

- Development of small pools not attractive in the current environment with oil price of \$50 due to capital rationing
- Surge in oil price is an overwhelming parameter but not a sufficient condition on its own.
- R & D granting further cost reductions and technological progress reducing costs are vital
- The UK Government should ensure preventing early closure of critical hubs and parent fields