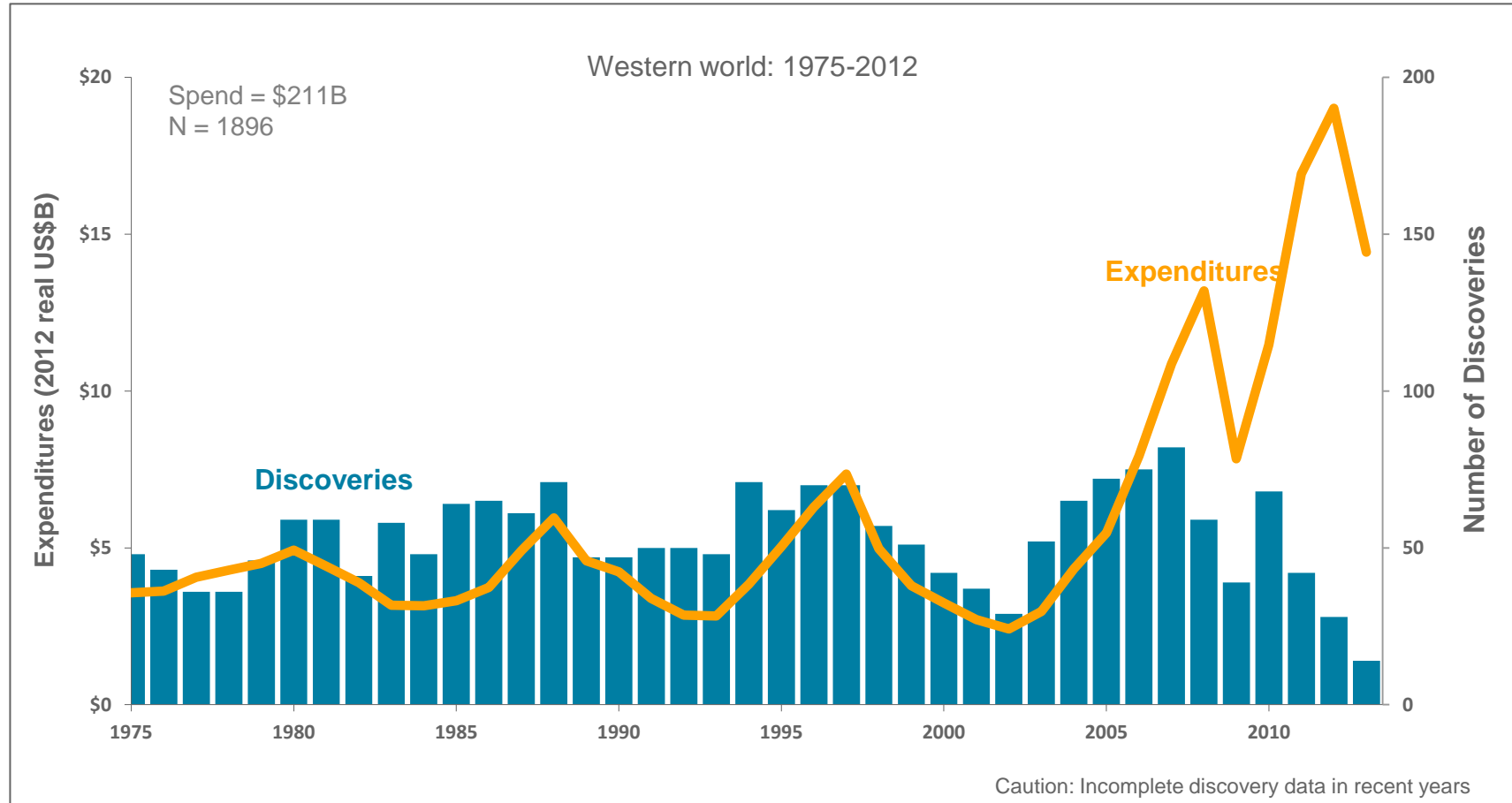


Exploration spend and historic discovery rates

The recent disconnect between spend & discovery rates

Significant* mineral discoveries (excluding bulks)



*Significant defined as >100Koz Au, >10Kt Ni, >100Kt Cu equiv, 250Kt Zn+Pb, >5Moz Ag, >5kt U₃O₈

What Exploration Companies want from UNCOVER

The collaborative R&D ecosystem: the actors & roles **Vectors to ore** **AMIRA CODES**
Maximising access through Portals to all data eg Auscope National Mineral Exploration Strategy endorsed by SCSR
Longer time from concept to testing is scaring the industry Therefore, without most effort focused on the rocks taxpayer support for UNCOVER is not justified
Regional IP/MT Surveys **More published modern examples of orebody signatures**
Deeper copper discoveries tend to be large High Res seismic to 2Km The challenge is that, as we go deeper the discovery tools become more costly and less effective

Bring on HeSeis!! Three quarters of the wealth created in Australia come from Tier 1 and 2 discoveries
On average 10 significant discoveries are made each year in Australia **Maximise Exploration Development Incentive** Signatures through Cover (AMIRA-COIRO)
Ability to map fertility enriched SCLM Event Signatures for gas deposits
Disconnect between spend and discovery rate **Precompetitive Titles Moratorium**
More on known Provinces

The contribution UNCOVER can make is mapping the the unknown Australian Basement.

Resolving the 4D geodynamic and metallogenic evolution of Australia Need Technologies | DEFCO, Airborne IP Magnetic Gradientometer
The average depth of drilling in Western Australia is 34 metres
Correlation of discovery rates with new technology in decline Geometallurgy decision support (AMIRA-UQ CSIRO CODES)

Its about collaboration stupid **Deeper discoveries will have to be competitive as they are more risky**

Predicting the mineral system footprint to maximise search area Need to know about the Background **Leveraging micro analytical capability**
No more detailed cover studies

Map the Unconformity above prospective Basement the value of discoveries found exceeds the cost of finding them ie exploration does add value
Risk and value analysis of exploration

Deep Earth Perspective Lithospheric Mantle is reservoir for ore elements
Fundamental Crustal architecture is especially important **Holidays 5 Hotspots**

More science on technologies and toolkits can and will be applied anywhere, not just in Australia.

Basement Samples Needed

What could we do differently?

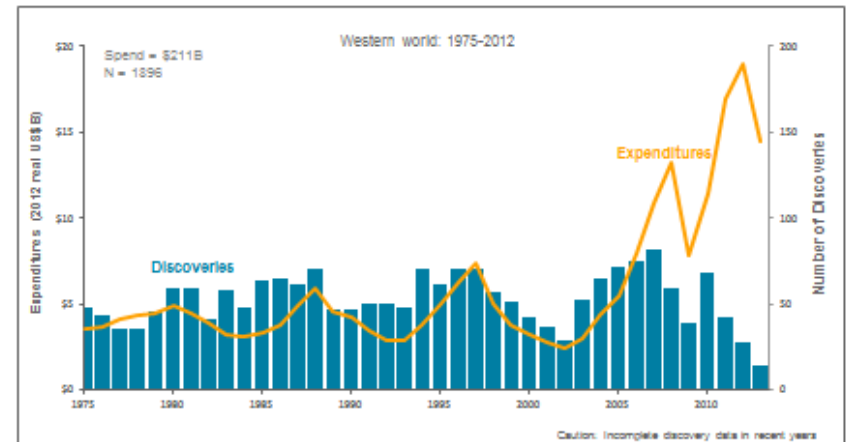
- We need an easily communicated economic target. Eg \$300 Million over 5 years to generate 3 Tier 1 terrains/targets.
- Focus on the unknown not the known
- New Models for Collaboration
- Communications strategy to the world eg PDAC, China Mining
- From Government Perspective
 - Speed up the process
 - Release more data/encourage companies to release early via incentives
 - Value add
 - Transparent Work Programme Tender
 - Keep / expand Drilling collaboration

RioTinto

Exploration spend and historic discovery rates

The recent disconnect between spend & discovery rates

Significant* mineral discoveries (excluding bulks)



Source: MinEx Consulting © February 2014

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Minerals Industry Challenges: Unlocking Australia's Potential Through Collaboration

What needs to be done



The way forward

- 1. Establish the vision:** For each of the five uncover themes determine where industry wants to be by 2025
- 2. Determine how we can achieve the vision:** Work out the research questions and tasks that need to be addressed/carried out in order to achieve the state we want to be by 2025
- 3. Work out where we are:** Determine the current state, who is already addressing what, the gaps & the priorities
- 4. Determine the resources we need:** Having established the gaps (& priorities), identify the resources required (the best brains must be brought to bear). It's a national endeavour : need to put aside petty politics
- 5. Identify the vehicle to get us there:** Identify the best platform to address the gaps and make things happen and get us there
- 6. Get on with it and make the above happen**



WITH COLLABORATION
GREAT THINGS

HAPPEN [©]

The case for collaboration: everyone benefits

METS Suppliers

Opportunity to participate in R&D projects/reduce R&D risk (& funding)

Networking with customer base/technical leaders

Develop relationships with customer base

Increase awareness of industry trends

Be at the forefront of new technologies

Opportunities to contribute to solutions to industry challenges

Opportunities to explore new technologies

Commercialisation opportunities

