Money makes the world go round
(and will it help to make the economy circular as well?)

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PGGM in a nutshell

- Dutch Pension service provider
- 2.7 million participants of 8 pension funds
- €190 bln AuM
- Annual ROI: 8.4% (1970-2015)
- **Mission**: Help people to realise a valuable future
A systematic change
Why relevant for financial institutes

Remaining linear is unsustainable, from a planet and prosperity perspective (people)
- To understand this new economical paradigm
- To avoid (anticipate on) stranded assets
  - linear risks, like increasing resource prices
- To accelerate value creation

- To prevent (economical) instability

- To prevent depletion of scarce resources
- Contribute to a sustainable society

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CSR
What did we learn?

1. General observations

2. Three levels of economic relevance:
   I. On the level of the value chain: IMPACT on BUSINESS MODELS
   II. On the level of the financier: (CORPORATE) FINANCE
   III. On the level of society: MACROECONOMIC IMPACT
- Value chain outcome is as circular as the weakest link is;
- Coordinated strategy. If stakeholders do not tune their activities, the transition will not be effective, efficient and at speed;
- Special attention required for consumers (no natural representative); and
- Coordination does not mean everybody has to do everything
G2: Linear risks are underestimated

- Corporate risks as volatile prices, resource scarcity and resource dependency are yet unknown
- These risks have impact on investment and debt portfolios, but also on stability of the economy
- Linear risks are not yet priced and the externality is not yet billed.
The circular economy transition interacts with other economic transformation, like sharing economy, the increasing transparency of externalities and disruptive business models.

New economic paradigm:

- **Macro level**: Decoupling economic growth from consumption
- **Meso level**: Decoupling value chain optimisation from supply chain competition
- **Micro level**: Decoupling usage from ownership
I.1 Understand the necessity of business model change

1. Resource control: capturing resources downstream → consumer use the product instead of owning it
2. Value chain collaboration
3. Services that capture products
4. Supply chain innovation (eg: reversed logistics)
I.2 Going circular is not a panacea

Assess the business bearing in mind new core competences and risks
New required strengths, new opportunities and risks (eg: lock in) in a market with different incentives and liabilities.

For financiers: Understand the business model changes, understand/assess the new SWOT and the responses of the management

Competition remains!
II.1 It is more about risk assessment than developing new financial products

<table>
<thead>
<tr>
<th>Circular risks</th>
<th>Linear risks</th>
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<tbody>
<tr>
<td><strong>Shift of mind set</strong> needed to see (used) products as valuable source of modules and/or materials instead of waste</td>
<td><strong>Dependency on virgin resources</strong> (risk of supply chain disruption)</td>
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<td>Required <strong>initial investment</strong> can cause deterioration in short-term margins: transition costs</td>
<td>Exposure to <strong>resource price volatility</strong></td>
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<td>Balance of <strong>short-term margin versus long-term stability</strong></td>
<td><strong>Increasing environmental legislation</strong> (externalities shift to product prices?)</td>
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<td>Market demand for the offered products: customers and companies are currently <strong>used to owning products</strong></td>
<td><strong>Growing population and increasing financial wealth</strong></td>
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<td>Dependency on <strong>supply chain collaboration</strong></td>
<td><strong>Effects of climate change</strong></td>
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<tr>
<td><strong>Unknown residual value</strong> of many products, due to small market of circular output companies (i.e. companies that upcycle, reuse, remanufacture, or refurbish)</td>
<td><strong>Demand</strong> for environmentally sound products</td>
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<tr>
<td><strong>Supply chain lock-in risks</strong></td>
<td>Businesses/products that become obsolete by holding onto old linear business practices <em>(stranded assets)</em></td>
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II.2 Financial insight is (still) poor

**Mutual learning is needed**

- Understand the new economic model from a company perspective:
  - *Cash flow*
  - *Cost structure (total cost)*
  - *Finance needs*
  - *Impact on ‘classical’ financial indicators, like solvency*
- “Proof” of positive effects of CE on company performance
- Insight in transition requirements
II.3 Value chain alteration requires a change of financial mindset

New business models, supply chain collaboration (increasing dependencies) and changing success factors have dominant implications:
- Competences and opportunities
- Risks and liabilities
- New entities within the value chain (e.g., recollection platforms)

Value chain finance (multiple companies) to share risks, costs and revenues requires financial innovation (FinTech, new legal framework and new products). Both for equity and debt.
III.1 Macro-economic gains are promising...

... but hidden if you only focus on GDP!

- A (slight) shift from material-intense to labor-intense economy: **more jobs**, especially in the fragile labor market segments (low education) → but the result of a bigger shift (shrinking and growing sectors)

- **Less dependency** on geo-political circumstances if you re-use resources that are already present

- When going circular the gain in ‘**social value**’ is much higher than the GDP-growth. (In NL for example 5.2% versus 1.2% [based on Stegeman, 2015])
III.2 The linear as default: regulatory and supervisory adjustments crucial

- Externalities disadvantage models that diminish negative impact: no reward for doing good $\rightarrow$ need for level playing field
- One-sided focus on ‘innovation risks’ in the supervisory framework compared to the ‘societal risks’: premium for a conservative attitude
III.3 The transition paths are the next big thing
III.3 The transition paths are the next big thing
The next step

UNDERSTAND

THEMATIC DIALOGUE WITH REAL ECONOMY BUSINESSES ON (FINANCIAL) BARRIERS AND CHALLENGES
Anticipating millions of layoffs from bloated state-owned coal and steel companies, Chinese authorities are shunting redundant workers into jobs in farming, forestry and public services.

At the recent annual session of parliament China's leaders stressed that a major restructuring of the economy, stripping out excess industrial capacity, would not mean a corresponding spike in jobless rates. The government has earmarked 100 billion yuan ($15 billion) for relocating and retraining state workers over two years, but with up to 6 million coal and steel jobs to be axed those funds could be spread very thin.
The expected positive impact of a more circular economy can only be accomplished if all stakeholder (public and private) work together.

POSITION PAPER “MONEY IN A CIRCULAR ECONOMY”

HOW FINANCE CAN ACCELERATE THE TRANSITION TO A CIRCULAR ECONOMY

Regarding European Commission’s Public Consultation on the Circular Economy

The members of the working group FinanCE¹, as part of the CE 100 platform established by the Ellen McArthur Foundation, welcome and appreciate the outreach of the European Commission to business and society. Only if we join forces and work together, with respect for the responsibility of the different stakeholders involved, we can successfully and efficiently transform our economy from a linear to a more value-based and collaborative circular economy. The working group FinanCE is dedicated to contribute fully to the transition.