

*A Policy Framework for  
Knowledge-Based Capital*

# *agenda*

- background
- drivers of change
  - digitization
  - forms of “ownership”
- human capital, patents, tax
- policy design

# **Tangible Assets**

*intangible assets*

- firm-level reporting
- national accounts

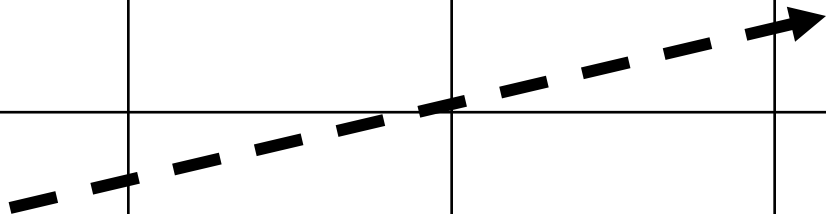
# Corrado-Hulten-Sichel

## *investment in intangible assets*

- Computerized Information
  - software
  - data
- Innovative Property
  - mineral exploration
  - scientific R&D
  - creative property
  - design
- Economic Competencies
  - brand equity
  - firm-specific human capital
  - organizational structure

- Computerized Information
  - software
  - data
- Innovative Property
  - mineral exploration
  - scientific R&D patents
  - creative property copyrights
  - design design rights
- Economic Competencies
  - brand equity trademarks
  - firm-specific human capital
  - organizational ~~structure~~ knowhow
  - networks between people and institutions

	<i>intangible</i>	<i>intellectual</i>	<i>knowledge</i>	<i>knowledge-based</i>	<i>innovative</i>
<i>capital</i>				<i>KBC</i>	
<i>assets</i>	<i>IA</i>				
<i>property</i>					<i>CHS</i>
<i>property rights</i>					

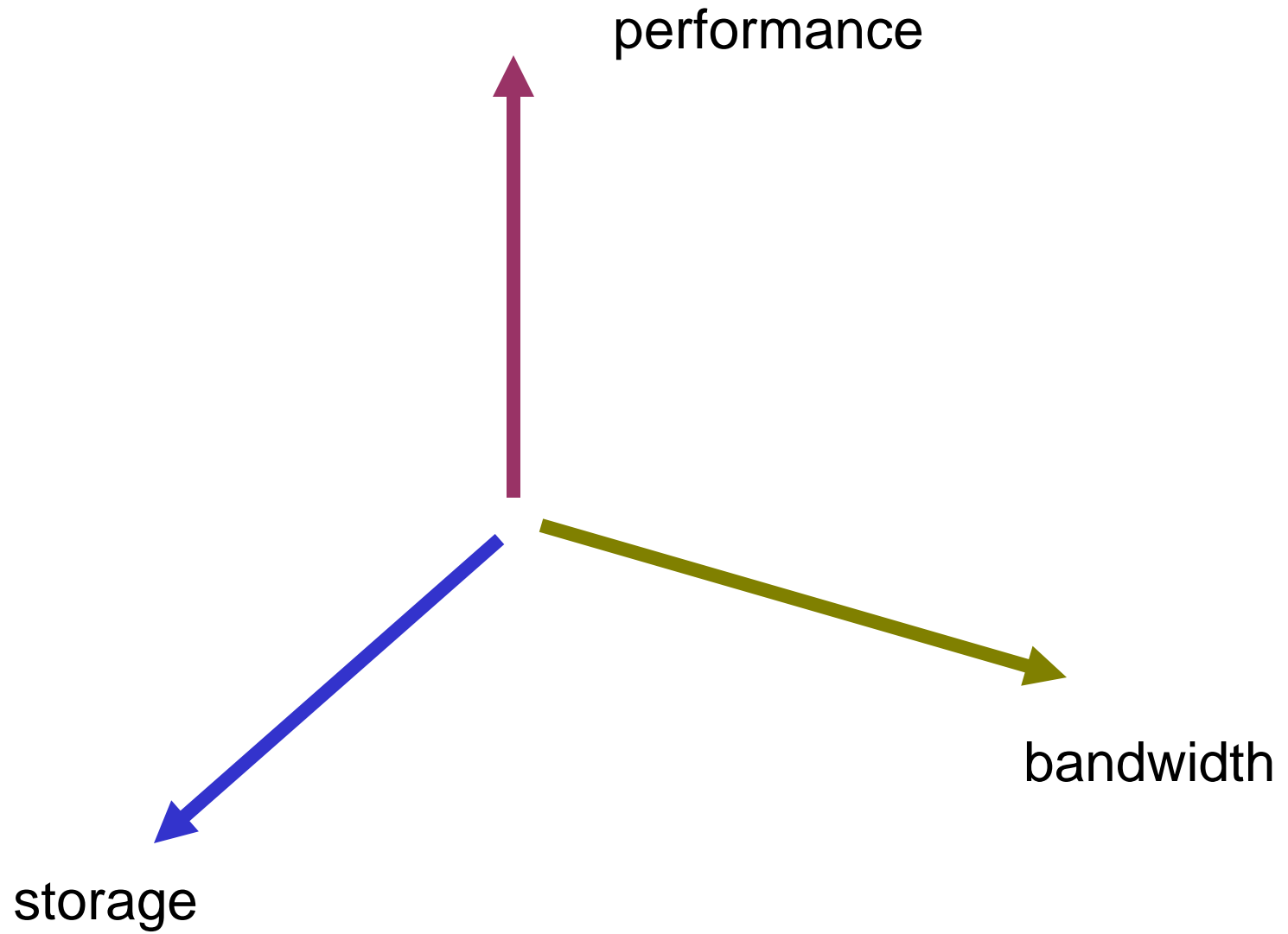


	<i>intangible</i>	<i>intellectual</i>	<i>knowledge</i>	<i>knowledge-based</i>	<i>innovative</i>
<i>capital</i>				<i>KBC</i>	
<i>assets</i>	<i>IA</i>				
<i>property</i>		<i>IP</i>			<i>CHS</i>
<i>property rights</i>		<i>IPR</i>			



## *knowledge-based assets*

- varying tradability, degrees and means of control
- distance from asset to market
- context-dependent value
  - vs market-centered/measured
  - many tech/business contexts, purposes
- unique >> knowledge about knowledge
  - opaque, imperfect, context-dependent
  - >> asymmetries, arbitrage
- changing parameters
  - digitization, “ownership”



## *digitization II: structural effects*

- diversity, expansion, infrastructure
  - elements/forms: code, data, links, addresses
  - combinations and structures: websites, networks, VOs
  - platforms, modularity, complementarity
- boundary-spanning
  - products, companies, markets, jurisdictions
  - scale economies, diminished transaction costs
  - >>> globalization
- interaction with institutions (laws, organizations, skills....)

# *knowledge-based assets*

- non-rivalrous (but variable excludability)
- license/contract-defined
- relationship-dependent
- mixed/hybrid ownership (ICT standards, PPPs)
- new asset classes
  - SPV, CDO, CDO squared, CDS....
  - shell, PAE (troll), aggregator, sovereign patent fund

**Tangible  
Assets**

financial assets

*knowledge-  
based assets*

**Tangible  
Assets**

```
graph TD; TA[Tangible Assets] <-->|vertical dashed red arrow| KBA[knowledge-based assets]; TA <-->|diagonal dashed red arrow| FA([financial assets]); KBA <-->|diagonal dashed red arrow| FA;
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The diagram illustrates the relationships between three types of assets. At the top left is a black-bordered rectangle labeled 'Tangible Assets'. At the bottom left is the text 'knowledge-based assets' in an italicized font. To the right is a yellow oval labeled 'financial assets' in green text with a green underline. Three red dashed double-headed arrows connect the three elements: a vertical arrow between 'Tangible Assets' and 'knowledge-based assets', and two diagonal arrows connecting 'Tangible Assets' and 'knowledge-based assets' to 'financial assets'.

*knowledge-  
based assets*

financial assets

“IP rights are the global currency for creating value for products and services, for all innovators, in all markets.”