



Australian Government  
Productivity Commission

# Investments in Intangible Assets and Australia's Productivity Growth

Productivity Commission  
Staff Working Paper

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The views expressed in  
this paper are those of the  
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# Preface

This staff working paper examines investment in intangible assets in Australia and highlights some significant issues relating to the measurement of intangibles and their contribution to productivity.

Helpful comments on the paper were received from Elizabeth Webster (Melbourne Institute of Applied Economic and Social Research), Derick Cullen (Australian Bureau of Statistics) and Myriam van Rooijen-Horsten (Statistics Netherlands). The Australian Bureau of Statistics provided vital assistance through the provision of unpublished data. Paul Roberts and Bertram Antioch of the Australian Bureau of Statistics and Ben Dolman of the Productivity Commission provided helpful advice on data issues and productivity measurement. Tracey Horsfall from the Productivity Commission assisted in the preparation of the paper.

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# Abbreviations and explanations

## Abbreviations

ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASCO	Australian Standard Classification of Occupations
ASIC	Australian Standard Industrial Classification
BERD	Business expenditure on research and development
BEA	Bureau of Economic Analysis (US)
BLS	Bureau of Labor Statistics (US)
CCLO	Classification and Classified List of Occupations
CEASA	Commercial Economic Advisory Service of Australia
CEO	Chief Executive Officer
CHS	Corrado, Hulten and Sichel
COE	compensation of employees
CPI	consumer price index
CVM	chain volume measure
EEBTUM	Employee Earnings, Benefits and Trade Union Membership survey
GDP	gross domestic product
GFCF	gross fixed capital formation
GMI	gross mixed income
GOS	gross operating surplus
GPI	Genuine Progress Indicator
GVA	gross value added
ICT	information and communication technology
IO	input-output

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IPD	implicit price deflator
IRR	internal rate of return
IT	information technology
JAA	Jalava, Aulin-Ahmavaara and Alanen
JIP	Japanese Industry Productivity database
LP	labour productivity
MFP	multifactor productivity
MH	Marrano and Haskel
MHW	Marrano, Haskel and Wallis
NCETS	National Centre for Education and Training Statistics
NIPA	National Income and Product Accounts (US)
OECD	Organisation for Economic Cooperation and Development
ONS	Office of National Statistics (UK)
PC	Productivity Commission
PIM	perpetual inventory method
PKS	productive capital stock
QALI	quality adjusted labour input
R&D	research and development
RBT	van Rooijen-Horsten, van den Bergen and Tanriseven
SNA	System of National Accounts
SOG	sources of growth
STAN	Structural Analysis
SU	supply-use
SUIC	supply-use industry code
SUPC	supply-use product code
VA	value added

## Explanations

Billion The convention used for a billion is a thousand million ( $10^9$ ).