



Contents

[List of Figures and Tables](#)

[Acknowledgements](#)

[Preface](#)

[PART I: A MISSION GROUNDED](#)

[What stands in the way of the next moonshot](#)

[1. The Mission and Purpose](#)

[2. Capitalism in Crisis](#)

[Finance is financing FIRE](#)

[Business is focusing on quarterly returns](#)

[The planet is warming](#)

[Governments are tinkering, not leading](#)

[3. Bad Theory, Bad Practice: Five Myths that Impede Progress](#)

[Myth 1: Businesses create value and take risks; governments only de-risk and facilitate](#)

[Myth 2: The purpose of government is to fix market failures](#)

[Myth 3: Government needs to run like a business](#)

[Myth 4: Outsourcing saves taxpayer money and lowers risk](#)

[Myth 5: Governments shouldn't pick winners](#)

[PART II: A MISSION POSSIBLE](#)

[What it takes to achieve our boldest ambitions](#)

[4. Lessons from Apollo: A Moonshot Guide to Change](#)

[Leadership: vision and purpose](#)

[Innovation: risk-taking and experimentation](#)

[Organizational change: agility and flexibility](#)

[Spillovers: serendipity and collaboration](#)

[Finance: outcomes-based budgeting](#)

[Business and the state: partnership with a common purpose](#)

[PART III: MISSIONS IN ACTION](#)

[What grand challenges we should tackle today](#)

[5. Aiming Higher: Mission-oriented Policies on Earth](#)

[Sustainable Development Goals and a green transition](#)

[Selecting a mission](#)

[Implementing a mission](#)

[Engaging citizens in a mission](#)

[Mission: a Green New Deal](#)

[Mission: innovating for accessible health](#)

[Mission: narrowing the digital divide](#)

PART IV: THE NEXT MISSION

Reimagining the economy and our future

6. Good Theory, Good Practice: Seven Principles for a New Political Economy

Value: collectively created

Markets: shaping not fixing

[Organizations: dynamic capabilities](#)

Finance: outcomes-based budgeting

Distribution: sharing risks and rewards

[Partnership: purpose and stakeholder value](#)

Participation: open systems to co-design our future

7. Conclusion: Changing Capitalism

[Notes](#)

[Index](#)

About the Author

Mariana Mazzucato (PhD) is Professor in the Economics of Innovation and Public Value at University College London (UCL), where she is Founding Director of the UCL Institute for Innovation & Public Purpose (IIPP). She is winner of international prizes including the 2020 John Von Neumann Award, the 2019 All European Academies Madame de Staël Prize for Cultural Values and the 2018 Leontief Prize for Advancing the Frontiers of Economic Thought. She was named as one of the ‘3 most important thinkers about innovation’ by the *New Republic* and one of the 25 leaders shaping the future of capitalism by *Wired*. Her highly acclaimed book *The Entrepreneurial State: Debunking Public vs. Private Sector Myths* (2013) investigates the critical role the state plays in driving growth and her book *The Value of Everything: Making and Taking in the Global Economy* (2018) looks at how value creation needs to be rewarded over value extraction. She advises policy makers around the world on innovation-led inclusive and sustainable growth. Her current roles include being a member of the Scottish Government’s Council of Economic Advisors; the South African President’s Economic Advisory Council; the OECD Secretary General’s Advisory Group on a New Growth Narrative; and the UN’s Committee for Development Policy (CDP). Through her role as Special Advisor for the EC Commissioner for Research, Science and Innovation, she authored the high impact report on *Mission-Oriented Research & Innovation in the European Union*, turning “missions” into a crucial new instrument in the European Commission’s Horizon innovation programme.

This book is dedicated to all those who fight for the common good.

List of Figures and Tables

Figures

- Figure 1: Twenty things we wouldn't have without space travel
- Figure 2: Cost comparison of major US government expenditures
- Figure 3: Private-sector investments for Apollo launch vehicles
- Figure 4: Seventeen UN Sustainable Development Goals
- Figure 5: A mission map
- Figure 6: Five mission areas selected by the EU (and interconnections)
- Figure 7: A mission map for 'Climate Action' (SDG 13)
- Figure 8: A mission map for 'Life below Water' (SDG 14)
- Figure 9: A mission map for the 'Future of Mobility'
- Figure 10: A mission map for 'Healthy Ageing'
- Figure 11: A mission map for 'Dementia'
- Figure 12: A mission map for the 'Digital Divide'

Tables

- Table 1: Selected technologies enabled by the NASA Apollo programme
- Table 2: The cost of the Apollo programme 1960–1973
- Table 3: Market failure vs. market shaping
- Table 4: Dynamic evaluation of public investment: a market-shaping view

Acknowledgements

Over the past several years, I have been lucky to work with policymakers who have interacted with me on many of the ideas in this book. The book is very much dedicated to them.

My ambition to rethink capitalism through rethinking the state began about a decade ago, when I started bringing together leaders from public organizations across the world to learn from each other – specifically, to better understand how to step outside the comfort zone of fixing market failures and into the ambitious, risk-taking world of making and shaping markets. These include leaders from organizations such as the Defense Advanced Research Projects Agency, Advanced Research Projects Agency – Energy, National Institutes of Health and NASA in the USA; the European Commission (EC) and the European Space Agency, the BBC, Government Digital Services and Innovate UK in the UK; the Chief Scientific Officer of Israel and Yozma in Israel; Vinnova in Sweden; Sitra in Finland; and different public banks like the KfW in Germany and BNDES in Brazil. What I found in all of my conversations with them was a real desire and thirst for a new framing of what public policy was about. It became clear that overcoming major technological and social challenges required a bold portfolio approach, a redesigning of tools like procurement and a proper economic theory to confront the directionality of growth head on. Engagement with them has enriched my understanding of the complexities of the ‘real world’ enormously.

My work also led me to set up the Institute for Innovation and Public Purpose (IIPP) at University College London (UCL). The objective was to replace a bilateral relationship with public organizations with a platform that could systematically explore how to ‘do government’ differently. At IIPP, my team and I are writing a new curriculum based on the premise that civil servants are not just market fixers but value co-creators and shapers. We are actively exploring questions such as: what value is being created, and is it good for people and the planet? How can we measure public value? What new participatory structures are needed to create an inclusive process while taking direction from democratically legitimate priorities, such as a green deal or a new way to understand the welfare state? We have worked with policymakers worldwide on transformative projects that inform our teaching and research – and vice versa – such as setting up a public bank in Scotland, rethinking innovation policy tools for the EC, and developing a carbon-neutral policy for the city of Manchester. Indeed, a siloed approach to academia has no place in learning how to do government differently. My thanks also to the senior leadership team across UCL: Provost Michael Arthur, David Price (Vice Provost for Research), and Alan Penn (ex-Dean of the Bartlett faculty) – who together not only hired me but also let me structure IIPP in a way that gives policy and practice as much weight as teaching and research, with the feedback between them our key goal.

I would also like to thank several leaders from the policy world who have worked diligently with me over the years and informed many of the insights in this book. This list includes Carlos Moedas, ex-commissioner for Directorate-General for Research,

Science and Innovation in the EC, and who chose me as a personal advisor. Together with his team we managed to bring a missions instrument to EC legislation (a story I tell in Chapter 5). It also includes Nicola Sturgeon, First Minister of Scotland, who trusted me to work with her team to design a new mission-oriented public bank. It includes Greg Clarke in his role as Secretary of State for the Department of Business, Energy and Industrial Strategy in the UK government, who listened to me talk endlessly about why industrial strategy should not be sector-focused but challenge-focused – and then asked me to set up a commission on Mission-oriented Industrial Strategy, which I co-chaired with Lord Willetts (David) – a collaborator full of wisdom since his days as Minister of State for Universities and Science. Finally, it includes policymakers with whom I have recently started working closely: Cyril Ramaphosa, the President of South Africa, whose country faces great challenges, including those around state capacity, but whose energy and interest in new modes of economic models is as engaging as it is challenging; Giuseppe Conte, Italy’s Prime Minister, who, in choosing me as a special advisor, allowed me to help structure Italy’s post-COVID recovery plan using the missions approach as a framework for addressing the country’s challenges around climate, health and digitalization; and Georgia Gould, leader of Camden Council, London, with whom I am embarking on a new adventure, the Camden Renewal Commission. The commission aims to use the missions approach to bring new participatory processes and governance models to Camden Council’s economic plan. One member of the Commission, George Mpanga (otherwise known as George the Poet), has provided particular inspiration for me in the last year through his quest to make sure that big ideas about reforming our dysfunctional and unequal economy are nested in new forms of storytelling.

I would also like to thank Fr Augusto Zampini, who led the Vatican’s post-COVID task force, and who, along with Pope Francis, has taught me much about the urgent need for a common good approach in economics.

I should note that the risk of working so closely with policymakers is that sometimes your ideas get misinterpreted or are implemented incorrectly. As long as this is a learning-by-doing process, that is fine. Indeed, this book aims to help governments see themselves as learning organizations. I would like to thank my colleagues who read drafts of the book – some in its entirety, others helping with sections – and provided incredibly useful comments. These include my long-time mentor Carlota Perez (reminding me never to forget the big picture!), and the following colleagues in alphabetical order: Antonio Andreoni, Guendalina Anzolin, Rosie Collington, Brian Collins, Rowan Conway, George Dibb, Ryan Farrell, David Frayman, Simone Gasperin, Dan Hill, Rainer Kattel, Katie Kedward, Henry Li, Laurie Macfarlane, Giulio Quaggiotto, Josh Ryan-Collins and Asker Voldsgaard. I am also deeply grateful for the in-depth comments on the draft from Patrick Besha, Senior Policy Advisor at NASA and Robert Schroder from the EC.

As with my previous book, I benefited immensely from a close collaboration with Michael Prest, a journalist and editor who helped translate my ideas into easier language. Our long chats in the Lord Stanley pub (again!) were embedded with reflections of the challenges global governments are facing, and the much-needed steering of the ship. His charm, warmth and friendship were just as important as his careful edits.

The final stages of editing were helped by Rachel Farrell, a patient editor able to bring elegance and logic back to tangly passages. Her tireless ability to work days, nights and weekends, while raising a young family, allowed me to start Mondays feeling that the constant changes were progressing closer to the finishing line.

I was also lucky to convince my neighbour and long-time family friend in north London, Dennis Yandoli, to read the book with a critical eye, and contribute to the stories told through his passion for the moon landing. He often came to our meetings wearing an Apollo 13 or JFK T-shirt.

I would also like to thank my editor at Allen Lane/Penguin, Stuart Proffitt, whose careful editing and comments pushed the boundaries of the book. He played devil's advocate and also challenged me to make sure the book was as much about rethinking capitalism as it was about rethinking government. Warm thanks also to the rest of the Penguin team: Etty Eastwood, Ania Gordon, Taryn Jones, Linden Lawson, Rebecca Lee and Alice Skinner. Sarah Chalfant, my agent at Wylie, and her excellent colleagues Ekin Oklap and Alba Ziegler-Bailey, helped me navigate the world of international publishers, while always finding the time to provide encouraging comments on articles, chapters and proposals.

Finally, I would like to thank my husband, Carlo Cresto-Dina, for always reminding me to reflect on the role of the cultural sector – and its centrality in creatively reimagining the life we want to lead. And I thank my children, Leon, Micol, Luce and Sofia, whose smiles, laughs, questions, playfulness and especially their deep empathy for all those around them make everything else secondary and worth the battle along the way.

Preface

As I write this book we are living through the COVID-19 pandemic, which poses massive challenges to every member of society around the world. Defeating the pandemic requires huge investments in physical and social goods and services – from the race to develop a vaccine or effective therapies, personal protective equipment (PPE) and appropriate methods of online learning for children not in school to new thinking about social safety nets. It also requires an unprecedented level of collaboration between nations, citizens, government and the private sector – the like of which we haven't seen in our lifetime. Fundamentally, it is a litmus test of state capacity and effective governance within and between countries.

Governments across the globe are adapting to this challenge in different ways and with different degrees of success. Governance is key to successful adaptation.¹ Countries' responses have differed in both the quantity and the quality of actions taken. Many governments have committed colossal sums with a 'whatever it takes' mentality. But if there is one thing we learned from the 2008 financial crisis, it is that injecting trillions into the economy will have little effect if the structures they are spent on are weak. We cannot risk that happening again.

Can we produce enough PPE for front-line workers? Enough ventilators for patients in intensive care units? A vaccine to help build immunity? Can we protect people who have lost their jobs so they have the basic right to a minimum income, food, shelter and education?

The answers to all these questions depend on the organization of our economy – more than just the amount of money being thrown at problems. It depends on the concrete structures, capacity and types of partnerships between the public and private sectors. It also requires the vision to imagine a different world. It is a vision for what kind of growth we want, plus the corresponding tools to get us that – that will create a new direction for the economy. And it is a new direction that is needed.

Vietnam's successful response to COVID-19 provides an interesting example. Although the country is still 'emerging' in terms of its developmental process, its government was able very quickly to spur the development of low-cost test kits. This was possible because it had the capability to mobilize different parts of society (academia, the army, the private sector, civil society) around a common goal and strategically use health research and development (R&D) procurement to 'crowd in' innovative solutions – that is, to use government spending to increase private-sector investment.² An effective public–private collaboration allowed for rapid commercialization of the kits, which were then exported to Europe and beyond, as well as deployed throughout Vietnam itself. The government was also able to galvanize poster artists, creatively harness social media and even produce stamps to promote behavioural change.³ In India, the state of Kerala's success story (in contrast to a patchy national response) is also the result of long-term investment in health (including the protocols put in place after the 2018–19 outbreak of the Nipah virus, like COVID-19 a zoonotic virus) and a successful public–private partnership model between

state medical services and private providers.⁴ Bolstered by a high level of citizen trust built over the years, the machinery of government, complemented by self-help groups, was quick to put in place tight restriction measures while catering for the most vulnerable, including migrant workers.⁵

But in many parts of the world the picture has been much less rosy. As this book goes to press, the problems being faced by both the USA and the UK are the result of forty years of weakening ability to govern and manage – fuelled by the ideology that government needs to take a back seat and only come in to fix problems when they arise. A public management creed that belittles the ability of government to act effectively and promotes privatization has fostered much outsourcing of government capacity to the private sector and a relentless but misguided focus on static measures of efficiency,⁶ leaving governments with fewer options and even latching onto unrealistic technology panaceas such as artificial intelligence or ‘smart cities’. It has also led to lower investment in public capabilities, the loss of institutional memory and an increased dependence on consulting companies, which have benefited from billions in government contracts.

In the UK, the government outsourced health contracts worth £9.2 billion in 2018 alone.⁷ Over 84 per cent of care home beds are in privately owned homes, and 50,000 of those are beds are in homes run by private equity companies whose ultimate aim is profit, not care. And this outsourcing has been combined with cuts in public investment. The total value of the public-health grant in the UK – which enables local authorities to provide vital health care and preventative services – has been declining in real terms, from £4 billion in 2015–16 to £3.2 billion in 2020/21, a decrease close to £900 million.⁸ Year-on-year cuts to the grant only came to an end in 2020 when COVID-19 was wreaking havoc, but the grant remained 22 per cent lower on a real-term per capita basis than in 2015–16.⁹ By this time, the decline had already caused substantial damage to local public-health capacity and compromised the effectiveness of its response to COVID-19.¹⁰

And the mantra about greater efficiency is just that – a mantra. In the UK, when the international consultancy company Deloitte was paid to manage COVID-19 testing they lost the tests. This was a reminder of the massive failure of G4S, another private company picking up public contracts, to provide security for the 2012 London Olympics, which led to the military being called in to save the day. Similarly, Serco, a private company that consistently wins outsourcing contracts, was fined for its fraudulent use of electronic tagging for prisoners.¹¹ And yet it won a £45.8 million test-and-trace contract just one year after it was fined more than £1 million for failures including breaching data protection rules (in which it accidentally revealed the email addresses of trainees).

The US federal government suffered a similar fate. In 2007 it drew up a plan to spur the development of low-cost, portable ventilators for deployment in cases of emergency. By early 2020, a full thirteen years later, no ventilators had been delivered, substantially because of its reliance on outsourcing. The COVID-19 crisis has made the consequences of this lack of capacity all the more dramatic. Indeed, President Barack Obama’s administration had already run into embarrassing IT problems in 2010 when it tried to roll out its health-care insurance reforms, the Patient Protection and Affordable Care Act – colloquially known as Obamacare. Many people could not access the site HealthCare.gov or complete their applications for insurance. A wave of bad publicity broke, which Obamacare’s opponents exploited. Had there been more technology capacity within the US government itself it is likely the administration would have faced fewer difficulties and less political flak. And yet, not surprisingly, in

called 'A Sense of Purpose'. In it he argued: 'Without a sense of purpose, no company, either public or private, can achieve its full potential. It will ultimately lose the license to operate from key stakeholders. It will succumb to short-term pressures to distribute earnings, and, in the process, sacrifice investments in employee development, innovation, and capital expenditures that are necessary for long-term growth.'⁷ A year and a half later, in August 2019, the same message was echoed by the Business Roundtable, a club of 180 powerful CEOs including those of Apple, Accenture and JPMorgan Chase. In a statement, its members argued that to foster a more functional form of capitalism, profits had to be more widely distributed to all stakeholders, including workers and communities – the key stakeholders.⁸

The problem is that, notwithstanding these calls for change, not much *is* changing. This is not only because the change needed must go to the very core of business models and value chains, instead of being treated as an afterthought; it is also because a renewed sense of purpose must go to the centre of the relationship between organizations in the economy, not just inside business. Change comes from reimagining *how* different organizations and actors in the economy co-create value. Yes, this book does focus on much-needed changes in our public institutions. But because government activity – direct investments, indirect subsidies, tax and regulations – lies at the centre of nearly all relationships, rethinking government means rethinking capitalism.

While this book is intended for both theorists and practitioners, it is meant especially as a guide to how we can 'do' capitalism differently. It argues that we should change organizations, governance structures and the design of the practical levers of economic policy – the tools we need to build a purpose-oriented economy.

2: Capitalism in Crisis

Even before the COVID-19 pandemic hit in 2020, capitalism was stuck. It had – and has – no answers to a host of problems, perhaps most crucially the environmental crisis. From global heating to biodiversity loss, human activity is eroding the conditions necessary for social and environmental stability.¹ Under current mitigation policy commitments, global surface temperatures are on track to increase by over 3°C relative to pre-industrial times – a magnitude that is widely accepted to have catastrophic outcomes.² Species extinction has increased 100 to 1,000 times the background extinction rate, leading some scientists to announce that we are witnessing the sixth mass-extinction event.³

Rather than having a sustainable growth path, capitalism has built economies that inflated speculative bubbles, enriched the already immensely wealthy 1 per cent and were destroying the planet. In many Western and Western-style capitalist economies, real earnings for all but a few have barely risen in more than a decade – in some cases, such as the USA, in several decades – exacerbating inequalities between groups and regions despite high levels of employment.⁴ The dynamics of inequality explain why the profits-to-wages ratio has reached record highs. Between 1995 and 2013, real median wages in Organization for Economic Co-operation and Development (OECD) countries grew at an annual average rate of 0.8 per cent versus 1.5 per cent growth in labour productivity.⁵ In the period 1979–2018, real wages for the 50th and 10th percentiles of the wage distribution stagnated: there was 6.1 per cent cumulative real wage change over the whole period for the 50th percentile, 1.6 per cent for 10th percentile – versus 37.6 per cent for 90th percentile. In rich countries, private wealth-to-income ratios increased from 200–300 per cent in 1970 to 400–600 per cent in 2010.⁶

These economies were also, after 2008, hooked on the drug of quantitative easing – central banks injecting massive amounts of liquidity into the system – although economic growth and productivity improvement remained weak.⁷ Personal debt was back to levels last seen in the early years of this century. By 2018, private debt to GDP reached 150 per cent in the USA, 170 per cent in the UK, 200 per cent in France and 207 per cent in China – all substantially higher than levels at the turn of the century.⁸

And much of business has been plagued by a dangerous combination of low investment, short-term management and high rewards to shareholders and company bosses.⁹ In advanced economies, business investment has barely recovered to 2008 levels.¹⁰ In the UK in the 1980s, typical CEO pay was twenty times higher than that of the average worker. By 2016, the average FTSE 100 CEO's pay was 129 times greater than that of the average employee.¹¹ Since 1980, UK dividend pay-out ratios have remained constant, irrespective of profitability. Share buybacks have increased in importance, consistently exceeding UK share issuance over the past decade. In the USA, total pay-outs to shareholders have come to almost \$1 trillion, equalling pre-crisis peaks, increasing from around 10 per cent of internal cash flow in the 1970s to 60 per cent by 2015.¹²

And difficulties are also being experienced in authoritarian, state-capitalist societies. Today, China, the leading authoritarian economy, remains weighed down by inefficient and heavily indebted state industries, a banking system with huge ‘zombie’ loans, an ageing population, and the massive task of shifting the economy away from excessive export dependency and towards greater domestic consumption. To be fair, it is making progress, and has real ambition about greening its economy, with over \$1.7 trillion being invested as part of its five-year plan. But a central planning model is not likely to be one that will be able to take on the bold reforms to public and private collaboration that this book envisages.

The COVID-19 crisis also revealed just how fragile capitalism really is. People working in the gig economy have no security. High levels of corporate debt – partly taken on to pay dividends, buy back companies’ own shares and indirectly boost senior executive pay – have left many companies with little to fall back on. Their strategy of relying on attenuated global supply chains to cut costs and reduce the bargaining power of their on-site workers proved to be an Achilles heel when the pandemic disrupted production globally and created fierce competition for even basic items, such as face masks. Some governments, particularly those of the UK and the USA, had outsourced so much of their capacity to the private sector and consultancies that they were not able to manage the crisis properly. This led to deadly blunders, as governments faced shortages in basic PPE and failed to set up enough testing for their populations.¹³ The ultimate irony was that governments long wedded to austerity abruptly switched their affections to public spending, borrowing and creating deficits on a scale that would earlier have caused ideological apoplexy, as they struggled to do ‘whatever it takes’ to keep their national economies alive. Hammered under the twin blows of a collapse in output and a collapse in demand – largely induced by the government to suppress the virus – the Thatcher–Reagan model of the economy and society has broken down, and the global economy is wrestling with an historically severe depression.

A sluggish global economy, which spells particular disaster for developing countries and the less well-off in developed countries, has exacerbated social and political tensions that have been intensifying for decades. For far too many people, life feels precarious, either because they are in debt or their savings at most cover one month of rent.¹⁴ Even in the USA, the world’s biggest economy, whose working class was once a byword for prosperity, a report found that nearly three in ten adults would need to borrow money or sell something to cover a \$400 unexpected expense.¹⁵

The balance of power has shifted away from workers and towards employers – for example, the relationship between an Uber driver and Uber as a multinational corporation is deliberately designed to shift risk from company to worker – and this, along with other cost-cutting practices that have reduced labour’s negotiating power, is one of the reasons why the ratio of profits to wages has reached a record high in the last decade.¹⁶ Others live hand to mouth on zero-hour contracts. Even when they have regular work, many people still depend on welfare to make ends meet.¹⁷ Yet it is the low-paid and disregarded workers – garbage collectors, postal staff, hospital cleaners, care workers, bus drivers – upon whom society came to depend most during the COVID-19 crisis, not corporate bosses, financiers and residents of tax havens.

Long-standing political rifts have grown wider: between nationalism and internationalism, democracy and autocracy, efficient and inefficient governments. A deep sense of injustice, powerlessness and distrust of elites – especially business and political elites – has eroded faith in democratic institutions. The global, multilateral system painfully constructed after World War Two and the broadly liberal, open values

Index

The page references in this index correspond to the print edition from which this ebook was created, and clicking on them will take you to the location in the ebook where the equivalent print page would begin. To find a specific word or phrase from the index, please use the search feature of your ebook reader.

- Abbey, George, 69
- Abellio (transport operator), 39
- Abernathy, Ralph, 62, 108
- Acorn (company), 158
- ACT UP (movement), 136
- additionality, 180
- Aerojet Rocketdyne, 64, 96, 97
- Affordable and Clean Energy (SDG 7), 110
- Agnew, Lord, 49
- Airbus, 34
- airline industry, 18
- Aldrin, Buzz, 66, 90, 99, 204–5
- Anders, William, 79
- Apollo [1](#) disaster, 65, 68, 73–4
- Apollo 7, 74
- Apollo 8, 74, 79
- Apollo programme: and computer technology, 82–4; controversy over, 62–3; cost, 3–4, 90; finance, 88–92, 181; innovation, 64–7; leadership, 63–4; navigation system, 81–3; and organizational change, 68–77; partnership with business, 93–102; public investment, 34, 60–1; risk-taking, 67; spillovers, 77–88; vision and purpose, 61–4
- Arendt, Hannah, 199–200, 211
- ARM Holdings, 158
- Armed Forces Procurement Act (1947), 93
- Armstrong, Neil, 66, 82, 90, 204–5
- ARPANET, 77
- artificial limbs, 87
- athletic shoes, 86
- Attenborough, David, 131
- Australia, 109

- baby formula, 87
- Bailey, Andrew, 185
- Bain Capital, 18
- Barker, Delia, 133
- Bauhaus, Germany, 210
- Bayh–Dole Act, 147