# Competition Policy for the Modern Economy: Overview and paths forward<sup>1</sup>

John Asker<sup>2</sup>

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Abstract: Australian competition policy has evolved significantly since the enactment of the *Trade Practices Act* in 1974, which marks the beginning of the modern era of Australian competition policy. During this period, the broader Australian economy has undergone a dramatic transformation, making today's economic landscape markedly different from that of the 1970s. This paper examines this evolution and explores the challenges and opportunities in adapting competition policy to effectively serve the modern economy.

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<sup>&</sup>lt;sup>2</sup> UCLA and NBER. Contact: johnasker@econ.ucla.edu

#### 1 Introduction

Competition policy in Australia stands at an inflection point, shaped by dramatic transformations in the economy since the Trade Practices Act of 1974. This paper examines various dimensions on which competition policy can evolve to continue to serve the modern economy, while maintaining its fundamental goal of promoting market efficiency and consumer welfare.

Section 2 explores how monopolization affects aggregate economic outcomes through a detailed theoretical framework, demonstrating how market power can distort resource allocation and reduce productivity. This analysis provides a foundation for understanding why competition policy matters not just for individual markets but for broader economic performance.

Having established the links between competition policy and broader aggregate economic policy objectives, Section 3 examines the evolution of the modern Australian economy since 1974. The analysis reveals significant structural changes: manufacturing's decline from 16% to 6% of GDP, the rise of services and mining, and most notably, housing costs increasing from 18.4% to 29.3% of household expenditure. In some other respects, the economy has been relatively stable. For instance, beyond the increase in housing expenditures, household expenditure has a composition similar to that in the mid-1980s. Section 3 concludes by using the recorded music industry as an extended case study, showing how technological innovation has repeatedly reshaped market structures while leaving basic consumption patterns unchanged.

Section 4 analyzes how competition manifests in innovative industries, again employing recorded music as an illustrative case study. Three key themes emerge. First, competition increasingly occurs *for* the market" rather than just *in* the market, with innovation driving successive waves of creative destruction. Second, complementary products and network effects have become crucial in shaping competitive dynamics. Third, traditional tools for analyzing competition are fit for purpose, but must be applied with care when addressing markets characterized by rapid technological change and complex product ecosystems.

Section 5 examines government's role in supporting competition. Special consideration is given to emerging issues like access to government-collected data and its impact on market competition, the value in ongoing competition evaluation of the competitive impact of government service provision and rule marking, and the incentives that shape the design of institutions that support competition law enforcement.

Section 6 concludes by identifying key opportunities for competition policy. It notes the relative value of monitoring in markets related to housing, mining, the economy's ongoing digital transformation, and care-based services. It emphasizes that success will require maintaining strong enforcement capabilities while continually adapting analytical and regulatory tools to serve an economy increasingly characterized by innovation and rapid change.

Throughout these sections, several core themes emerge. First, while basic principles of competition policy remain fit for purpose, their application must evolve to address new market realities. Second, innovation and technological change have transformed how firms compete, requiring increasingly sophisticated analytical approaches. Third, the interconnected nature of modern markets means competitive bottlenecks can arise in unexpected places, at times demanding a broader perspective in competition analysis. Lastly, traditional competition concerns, particularly regarding collusive behavior, remain vital. Old problems can arise in new markets, and recent economic research emphasizes the human cost that traditional competition concerns, like collusion, can impose on society.

# 2 Monopolisation and the aggregate economy

Monopolisation can distort the allocation of resources in an economy and distort aggregate economic outcomes. A simple teaching example is useful for showing how this can work. This teaching example is highly stylised – it omits many important features of modern industries, including innovation and international trade. Nonetheless, it provides a basis for discussing the link between the traditionally microeconomic focus of competition policy and broader macroeconomic objectives.

Figure 1, below, provides such an example. Figure 1 shows two meaningfully important sectors in a hypothetical economy. Sector 1 is monopolised. Sector 2 is competitive (modelled using the textbook construct of perfect competition). All features of the two sectors are identical, other than the degree of monopoly power that is being exercised.

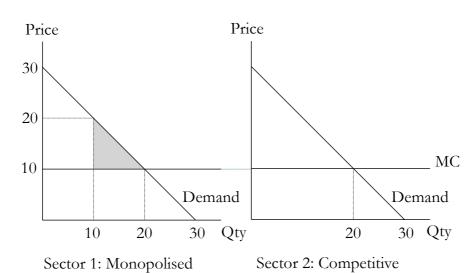


Figure 1: Costs and impacts of the monopolisation of a sector of the economy

Output in sector 1 is reduced relative to the perfectly competitive outcome. Monopolies seek to increase profits by charging higher prices and selling fewer products. Their profits come from the margin earned on that they do sell. In this instance, the marginal cost of production is 10, the price of the monopolized output is 20, and so the margin is 10. Since the monopolised sector sells 10 units, producers in this sector make a combined economic profit of 100. By contrast, in the competitive second sector firms merely breakeven.

The standard textbook treatment of monopoly emphasizes the deadweight loss, which are the gains from trade forgone by virtue of the monopoly withholding output. This is indicated by the shaded triangle in Figure 1 in the left panel, representing sector 1. This focuses on the *within* sector cost of monopolisation.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Harberger, A. "Three basic postulates for applied welfare economics." *Journal of Economic Literature*, Vol 9(3), (1971), pp. 785–97 and Harberger, A. "The measurement of waste." *American Economic Review*, Vol 54(3), (1964), pp. 58-76 provide conditions under which the economy wide sum of these triangles is an accurate measure of the aggregate impact of monopolisation. A helpful survey is provided by Hines, J. "Three sides of Harberger Triangles" *Journal of Economic Perspectives*, 13(2), (1999), pp. 167-188.

To appreciate the extent of the aggregate cost of monopolisation, it is important to examine the potential impact on resource allocation across the wider economy.

At this point, it is helpful to put a little more structure on production.<sup>4</sup> Consider the case where only one factor of production is required to make a unit of output. For convenience, call this factor 'labour'. If there is sufficient excess labour in the economy, the 10 units of unrealized output in sector 1 that generates gains from trade represents labour that could be gainfully deployed but is not. This is unemployment. Further, the economy is producing inside its production possibility frontier and has undeployed productive resources. Properly measured, this represents a reduction in productivity.<sup>5</sup>

In the alternative, consider the implications of the market outcomes in Figure 1, in an economy at full employment. In this economy, there is no undeployed labour. Here, to expand output in sector 1, labour must be taken from sector 2. This reduces output in sector 2. Despite this, doing so expands the value of output. Note that an incremental increase in output in sector 1 generates \$10 worth of gains from trade, while the incremental decrease in output in sector 2 forgoes producing a unit of production for which the value of the output is equal to its resource cost of production. The economy is far better off by moving productive resources from sector 2 to sector 1. This expands the value of output, increases gains from trade and, properly measured, increases productivity.

While the standard textbook treatment of monopoly emphasizes the lost gains from trade (deadweight loss), looking at monopoly power in the context of an aggregate economy, puts additional emphasis on features of the conduct or the economy that inhibit the reallocation of resources to the monopolized sector.<sup>6</sup> If this reallocation is unimpaired, then the economy can cure itself: the higher prices of monopoly serve as a signal that further resources can earn an above-market return and be profitably deployed.

When barriers to reallocation exist, this self-correcting feature of the economy is retarded, and the costs of monopolisation may endure. This draws attention to self-curing features of the economy that support monopoly, whether coming from the conduct itself, structural features of the relevant market, government intervention or some other source. To the extent that self-curing takes some time, this can provide a plausible motivation for competition policy.<sup>7</sup> As Robert Bork noted:

"[Competition policy] is valuable because in some cases it can achieve results more rapidly than can market forces."8

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<sup>&</sup>lt;sup>4</sup> Edmond, C., V. Midrigan and Y. Xu. "How costly are markups?" *Journal of Political Economy*, Vol. 131(7), (2023), pp. 619–1675 provide a formal general equilibrium framework with endogenous labour supply in which to consider these misallocative impacts both cross-sectionally (as discussed here) and intertemporally (impacting, for instance, firm entry and investment).

<sup>&</sup>lt;sup>5</sup> Often, in microeconomic studies, productivity is measured as firm revenue divided by some measure of the cost of inputs. Where the degree of monopoly power is being varied this is problematic as a reduction in revenue will be interpreted as a reduction of productivity under the mechanical application of standard methods. This is a consequence of "valuing" output using firm revenue rather than from using a well-defined welfare metric. See, for instance, Zegeye, A. and L. Rosenblum. "Measuring productivity in an imperfect world" *Applied Economics*, Vol. 32, (2000), pp. 91-105.

<sup>&</sup>lt;sup>6</sup> The economic literature has discussed costs of monopoly beyond those discussed here. For instance, Posner, R. "The Social Costs of Monopoly and Regulation" *Journal of Political Economy*, Vol. 83(4), (1975), pp. 807-828 discusses the potential costs of rent seeking associated with obtaining and maintaining a monopoly position. Schmitz, J. "Monopolies Inflict Great Harm on Low- and Middle-Income Americans", *Federal Reserve Bank of Minneapolis Staff Report*, May 2020, Report 601, provides a related discussion of how the economics profession has conceptualized monopoly and its societal costs from the early part of the 20<sup>th</sup> century through the present day.

<sup>&</sup>lt;sup>7</sup> See, for instance, Collard-Wexler, A. "Mergers and Sunk Costs: An application to the ready-mix concrete industry" *American Economic Journal: Microeconomics*, Vol. 6(4), (2014), pp. 407-447.

<sup>8</sup> Bork, R. The Antitrust Paradox: A Policy at War with Itself. (The Free Press, New York, 1978. Reprinted 1993), p. 311.

## 3 What is "competition in the modern economy"?

Understanding competition in the modern economy requires an understanding of what the modern economy looks like, what the word competition means in the context of competition policy, and the many ways competition can unfold in the modern economy. In what follows, I step through each of these elements.

Section 3.1 seeks to understand the evolution of the modern economy. The Australian economy has seen significant structural changes since 1974, with housing costs rising dramatically (from 18.4% to 29.3% of household expenditure), manufacturing declining sharply (from 16% to 6% of GDP), and services and mining growing substantially. While household non-housing consumption patterns have remained relatively stable (with recreation, transport and food consistently comprising about 54-55% of non-housing expenditure), the way these goods and services are produced and delivered has changed markedly. The recorded music industry serves as an illustrative example of these changes, where the final product remained largely unchanged, but the delivery method transformed multiple times through technological innovation, shifting from vinyl to cassettes to CDs to downloads to streaming, demonstrating how production and distribution methods can evolve dramatically even as consumer enduse remains similar.

Section 3.2 unpacks how economists concerned with competition policy conceptualize and operationalize the notion of competition. Competition is understood as "healthy rivalry, on the merits, to win the patronage of customers by offering them superior value,". Competitors are firms whose products are substitutes (measured through diversion ratios or cross-price elasticities). A variety of tools exist to evaluate the locus of competition in a potential market. The Hypothetical Monopolist Test (HMT) is a commonly applied tool used to determine whether products provide meaningful competitive constraints. An increasingly prominent challenge in modern, innovative industries is determining the relevant product for competition analysis, particularly when firms' offerings (particularly in the information technology space) combine multiple features and services.

With this foundation, section 4 discusses aspects of the competitive process specific to modern innovative industries, again using the example of the recorded music industry for narrative support.

#### 3.1 What is the "modern economy"?

Since 1974, the Australian economy has changed in several ways that are relevant to the administration of competition policy. The story is best told through data.

Households are the ultimate consumers of the goods and services produced in the economy. In 1984, 18.4% of household weekly expenditure was on housing (rent, mortgage payments and household capital expenditure). This stayed relatively constant through the mid 1990s and then started to climb steadily over the next 20 years, reaching 29.3% of household expenditure in 2015-16. The increase in household expenditure on housing is, by far, the biggest change in expenditure in the modern era. Housing overshadows any other expenditure item for Australian households.

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<sup>&</sup>lt;sup>9</sup> ABS Release 65300DO001\_201516 Household Expenditure Survey, Australia: Summary of Results, 2015–16, Table 1.1 Household Expenditure, 1984 to 2015–16(a). Total household expenditure is computed as the sum of Goods and Services, Mortgage payments – principal (selected dwelling) and Other capital housing costs.

Beyond housing, as shown in Table 1, some changes in expenditure composition have occurred, but the overall pattern is relatively stable. Expenditure on 'Recreation', 'Transport' and 'Food...' comprised 55% of household expenditure, excluding housing, in 1984, and 53.7% of expenditure (again excluding housing) in 2015-16. Predominantly, households spend money on having fun, going places and eating. The greatest changes have been an increase in expenditure shares on 'Education', 'Medical care...' and 'Communication', with declines in 'Clothing and footwear' and 'Household furnishing and equipment'.

Table 1: Percent decomposition of household expenditure 1984 and 2015-16.

	Total household	expenditiure:				
	Includes housing expenditure			Excludes housing expenditure		
	1984	2015-16	Change	1984	2015-16	Change
Education	0.9%	2.7%	1.9%	1.0%	3.8%	2.8%
Medical care and health expenses	3.6%	5.1%	1.4%	4.5%	7.2%	2.7%
Communication	1.7%	2.9%	1.2%	2.1%	4.1%	2.0%
Recreation	11.2%	10.6%	-0.6%	13.7%	15.0%	1.3%
Miscellaneous goods and services	5.9%	6.0%	0.1%	7.2%	8.5%	1.3%
Household services and operation	2.4%	2.8%	0.4%	2.9%	3.9%	1.0%
Personal care	1.7%	1.8%	0.1%	2.1%	2.5%	0.4%
Domestic fuel and power	2.7%	2.5%	-0.2%	3.3%	3.6%	0.2%
Transport	15.3%	12.8%	-2.5%	18.7%	18.0%	-0.7%
Tobacco products	1.5%	0.8%	-0.7%	1.8%	1.1%	-0.7%
Alcoholic beverages	3.2%	2.0%	-1.2%	3.9%	2.8%	-1.1%
Food and non-alcoholic beverages	18.4%	14.6%	-3.8%	22.6%	20.7%	-1.9%
Clothing and footwear	6.1%	2.7%	-3.4%	7.4%	3.8%	-3.6%
Household furnishings and equipment	7.2%	3.6%	-3.6%	8.8%	5.1%	-3.7%

Note: Data from ABS Release 65300DO001\_201516 Household Expenditure Survey, Australia: Summary of Results, 2015–16, Table 1.1 Household Expenditure, 1984 to 2015–16(a). Total household expenditure is computed as the sum of Goods and Services, Mortgage payments – principal (selected dwelling) and Other capital housing costs. When household expenditure excludes housing it comprises all elements of Good and Services except Current housing costs (selected dwelling). The three largest categories of expenditure are highlighted in grey.

Final consumption is important, but so is production. Final consumption goods need to be produced, and much of economic activity occurs in the production of intermediate goods – those goods that are made to facilitate the production of other goods. One way to see how the economy has evolved on the production side is to look at the contribution of sectors to aggregate GDP.

Figure 2 shows the evolution of the share of GDP by sector, for the six sectors with the largest absolute percentage change between 1974 and 2019 (to make the figure easier to read, 'Professional, scientific and technical services' are combined with 'Financial and insurance services'). 'Manufacturing' shrunk dramatically over this period (from 16% to 6% of GDP). 'Mining' increased from 9% to 16%. The composite category covering 'Professional... services' increased from 8% to 14%. Compared to 1974, the modern Australian economy has become meaningfully more focused on human-capital-intensive services and export-oriented extractive industries.

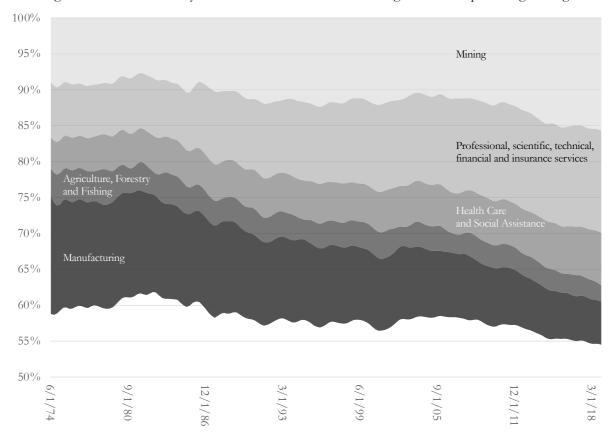


Figure 2: Share of GDP by sector: The six sectors with the largest absolute percentage change

Note: Data from ABS Release 5206.0 Australian National Accounts: National Income, Expenditure and Product, Table 6. Gross Value Added by Industry, Chain volume measures. Agriculture, Forestry and Fishing: ABS Series ID A2716378X. Manufacturing: ABS Series ID A2716384V. Professional, Scientific and Technical Services: ABS Series ID A2716408A. Financial and insurance services: ABS Series ID A2716406W. Mining: ABS Series ID A2716381L. Health Care and Social Assistance, ABS Series ID A2716412T. Gross Domestic Product, ABS Series ID A2304334J

Figure 3 conducts a similar exercise but focuses on the share of employment. 'Manufacturing' has declined from 17% of employment in 1984 to 6% in 2024. This mirrors the change in GDP composition. 'Mining', by contrast, comprised 1.4% of employment in 1984, rising to 2% in 2024. 'Mining' is relatively capital intensive, but the considerable rise in contribution to GDP has generated a meaningful relative increase in employment share.

That said, the largest increase in employment share has been in 'Health...' followed by 'Professional ... services'. In 1984, 'Health...' comprised 8% of employment, rising to 16% in 2024. Similarly, 'Professional ... services' comprised 4% of employment, rising to 9% in 2024. This is consistent with a greater emphasis in the modern economy on care and services.

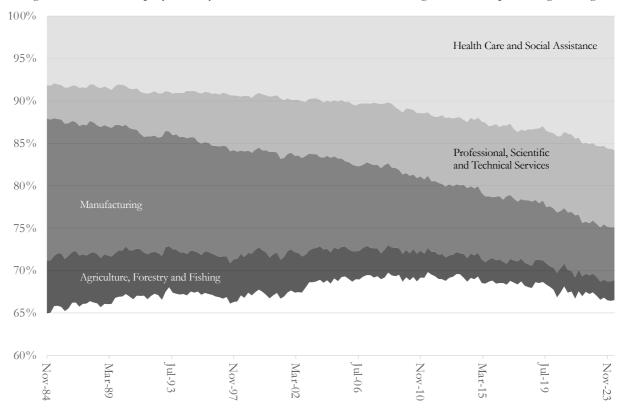


Figure 3: Share of employment by sector: The four sectors with the largest absolute percentage change

Notes Data from ABS release 6291.0.55.001 Labour Force, Australia, Detailed, Table 4 Employed persons by Industry division of main job (ANZSIC) - Trend, Seasonally adjusted, and Original. Agriculture, Forestry and Fishing: ABS Series ID A84090257V. Manufacturing: ABS Series ID A84090259X. Professional, Scientific and Technical Services: ABS Series ID A84090253K. Health Care and Social Assistance, ABS Series ID A84090254L. Total employed, ABS Series ID A84932399X.

The aggregates surveyed in Table 1 and Figures 2 and 3 indicate a range of changes over the last 40 or more years. These changes, a decline in manufacturing, a surge in services and mining, and a marked increase in spending on housing all indicate significant changes. That said, it is hard, at least in these aggregates, to see many of the changes that have occupied much of the contemporary debate over competition policy: Where, for instance, are the internet, the pervasive digitalization of society, data, and innovation generally?

The answer is that these aggregate patterns are consistent with many of the patterns that have occupied competition policy in recent decades. Some work, however, needs to be done to draw the links. The short version is that, while the composition of non-housing final consumption is relatively stable in the aggregate, the way that consumption is delivered and produced is now markedly different. This is reflected in the decline in manufacturing, the rise of services and the increase in linkages with global markets. These broad changes can be usefully discussed through the lens of the ongoing transformation of a single industry.

Recorded music provides that lens. Recorded music is, in terms of final consumption, relatively unchanged from 1974 through to the present day. The audio experience of listening to Glenn Gould's 1955 performance of Bach's Goldberg Variations is based on the same recording, whether listened to in 1974 or 2024. Similarly, Cold Chisel's debut single, "Khe Sanh", remained unchanged following its 1978 release. This means important features of the 'product' can be thought of as constant over time.

Importantly, however, the format through which the audio experience is delivered has changed rapidly and repeatedly in the last 50 years. <sup>10</sup> Figure 4 shows, for the United States, the revenue earned by each recorded music format since 1974. In 1974, vinyl records and 8-track cartridges were the formats through which most recorded music was distributed. To listen to music, most consumers used a record player. While the cassette format was present in the market in 1974, it did not become a significant method of distributing and listening to recorded music until roughly 1979, when the Sony Walkman was released.

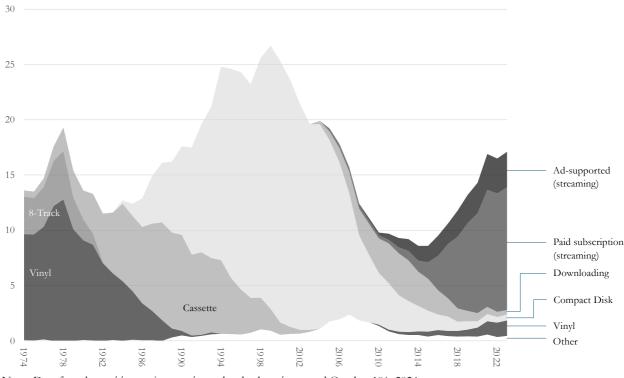


Figure 4: Recorded music revenue, U.S., by format, 2023 U.S. dollars

Notes Data from https://www.riaa.com/u-s-sales-database/accessed October 10th, 2024.

The 1980s and 1990s saw a steady transition from the vinyl record to the cassette and then the CD. By 2000, the CD was, by far, the leading format for distributing and listening to recorded music. By 2005, however, a new transition had begun, triggered by growth in access to the internet and the adoption of the 3G cellular standard. Internet access made it practical to download music to a personal computer. The 3G cellular standard allowed music to be incorporated in mobile phones. <sup>11</sup> This triggered downloading as a form of distribution, which (following adoption of 4G cell standards) was superseded, in large part, by music streaming. <sup>12</sup>

The delivery of recorded music has seen a series of technological transitions since 1974. Vinyl was superseded by the cassette, which was superseded by the CD, which was superseded (briefly) by downloading and then by streaming. Each transition was accompanied by a complementary set of hardware innovations (the Walkman and the Internet being prominent). These transitions also impacted

<sup>&</sup>lt;sup>10</sup> See chapter 11 of Krueger, A. Rockonomics. (Penguin Random House, New York, 2019).

<sup>&</sup>lt;sup>11</sup> This was first manifested, in the mid-2000s, with a brief surge of revenue derived from selling ringtones based on popular recorded music. This is included in the "other" category in Figure 3.

<sup>&</sup>lt;sup>12</sup> Interestingly, vinyl records have also seen a measurable resurgence in popularity.

the revenue generated by recorded music. The rise of the CD accompanied a doubling of revenue, while internet-based delivery initially more than halved revenue. These are dramatic changes.

Aside from these waves of innovative destruction, recorded music also illustrates other broader trends. Vinyl records required a manufacturing base. The physical record needed to be made. Further, Vinyl records are relatively large, making them somewhat cumbersome to transport. Local production of records started in Australia in the 1920s and continued at scale through the late 1980s. Hy 2016, only one record press was in operation in Australia. CDs, by contrast, were more compact and equally durable. The transition from the CD to digital delivery via streaming and downloading removed any residual need for a manufacturing base specific to the recorded music industry. That is, as delivery transitioned from physical to digital, the need to make the physical format declined. Obviously, a range of factors influence the decline in manufacturing in Australia, but the narrative offered by recorded music highlights the role of technological transitions in shrinking manufacturing elements of the intermediate parts of the supply chain. The stransition of the supply chain.

#### 3.2 What is "competition"?

The modern Australian economy comprises of a wide variety of activity. In many areas of activity, little has changed since 1974. In other areas of activity, the economy is fundamentally different. Across such a wide range of economic activity, it is important to stay close to fundamental principles of economics when considering what comprises competition.

A useful, workable, definition of a competitive market is one in " ... there is healthy rivalry, on the merits, to win the patronage of customers by offering them superior value." <sup>16</sup> Often, especially in introductory textbooks, a competitive market is defined with reference to the perfectly competitive model in which firms are price takers and, for the incremental unit of production, the price of that unit is equal to its incremental cost. By contrast, the definition offered here focuses on the process of competition and places rivalry and the creation of customer value at the centre of the enquiry. This is important. In practice, many firms and products have features that require substantial fixed costs to develop. For competition to occur in the provision of these products, risk-adjusted fixed costs need to be covered in expectation and some meaningful degree of producer surplus may be required to cover these costs and the risk associated with the venture. Hence, any notion of competition, of the sort relevant to competition policy must recognize the need for firms to be able to cover the risk and fixed costs related to product development and commercialization. Focusing on the rivalry between firms in creating value for customers requires recognition of this feature. Nonetheless, rivalry to win the patronage of consumers by offering superior value works to the advantage of consumers. To that end, consumer surplus is a useful metric through which to measure the relative health of the competitive process.

Having provided a workable definition of competition, the work now turns to unravelling who competitors are and how competition may arise. The task of working out what the locus of competition might be is described below, in broad strokes. This is a preliminary step in any inquiry into competition.

<sup>&</sup>lt;sup>13</sup> Australia's first record press started in the mid-1920s, although many records were imported. https://musicbusinessresearch.wordpress.com/2011/04/28/the-early-record-industry-in-australia-part-3/ accessed October 10<sup>th</sup>, 2024

<sup>14</sup> See https://www.vinylstation.com.au/articles/australian-vinyl-record-manufacturing accessed October 10th, 2024.

<sup>&</sup>lt;sup>15</sup> Conditional on an effective transition of resources between sectors, this would also tend to suggest that at least part of this transition was productivity enhancing.

<sup>&</sup>lt;sup>16</sup> See Shapiro, C. "Competition and Innovation: Did Arrow Hit the Bull's Eye?" in *The Rate and Direction of Inventive Activity Revisited*, eds. J. Lerner and S. Stern (Chicago, IL: University of Chicago, 2012), pp. 361–404 at p. 383

The evolving modern economy, as described above, presents a range of challenges in defining this locus of competition. Resolving the challenges are central to effective administration of competition policy in many modern industrial settings.

As a general matter, a competitor constrains a firm when customers of the firm view that competitor's product as a substitute. Economists define substitutes in terms of elasticities.<sup>17</sup> Economists call two firms' products substitutes when the cross-price elasticity is positive, that is, when the quantity sold by one of the firms increases when its rival's price increases. Or, equivalently, when its rival's quality decreases.<sup>18</sup> By contrast, economists call two firms' products complements when the cross-price elasticity is negative, that is, when the quantity sold by one of the firms decreases when its rival's price increases. Analogous definitions for substitutes and complements can be defined with respect to changes in quality instead of changes in price.

A useful reformulation of price elasticities is that of diversion. Diversion refers to lost sales due to a price increase or product removal that are captured by a supplier of a substitute.<sup>19</sup> Diversion is typically measured by a diversion ratio, which refers to the proportion of total sales lost that is captured by a rival. Diversion answers the following question: "If a firm increases its product's price, of the lost quantity sold, what percent goes to a given rival?" Positive diversion implies that cross-price elasticities of demand are positive and that the two firms' products are substitutes. The greater the degree of substitutability between two firms' products, the closer they are as competitors, and the higher the diversion ratio. Diversion ratios are invariant to measurement in terms of quantities or revenue units, as they are measured with reference to the firm that increases its product's price.

Drawing inference on the *degree* of competitive constraints from the magnitude of cross-price elasticities can be challenging because cross-price elasticities depend on the existing shares of quantities sold by the alternates to the firm raising price. To make this concrete, consider a firm selling product A that competes with two other firms selling products B and C. A accounts for 50 percent of the quantity sold, B accounts for 40 percent, and C for 10 percent. Suppose that, in response to a 1 percent price increase for product A, 10 percentage points of product A's sales are diverted equally to B and C. This hypothetical level of equal diversion indicates that B and C are equally close competitors. However, cross-price elasticities estimated from this price increase would indicate that C has a cross-price elasticity four times as large as B because C starts with one quarter of the quantity sold of B. For this reason, economists typically use diversion to infer the extent to which a firm imposes competitive constraints on another firm.

Two concepts related to substitution, that arise in a variety of practical settings, are those of multi-homing and switching. Multi-homing occurs when customers of a given product purchase that product from multiple firms. This is a term more commonly applied with respect to multi-sided platforms. Switching occurs when customers of a given product completely stop using one firm's offering and start using another's. Multi-homing and switching are distinct from, but informative about, substitution.

<sup>&</sup>lt;sup>17</sup> An elasticity measures the percentage change of a variable in response to the percentage change of another variable. Mankiw, N. G. *Principles of Economics*, Eighth Edition, (Boston, MA: CENGAGE Learning Custom Publishing, 2018), pp. 90, 98.

<sup>&</sup>lt;sup>18</sup> Put differently, consumers react to quality-adjusted prices. Varian, H. *Intermediate Microeconomics: A Modern Approach*, Seventh Edition, (New York, NY: W.W. Norton, 2005), p. 658.

<sup>&</sup>lt;sup>19</sup> Davis, P. and E. Garcés, *Quantitative Techniques for Competition and Antitrust Analysis*, (Princeton, NJ: Princeton University Press, 2010), p. 107.

Finally, a competition inquiry can only examine meaningful competitive constraints. A properly defined market should contain the set of meaningful competitive constraints. To judge whether a candidate market satisfies this criterion, economists typically deploy a Hypothetical Monopolist Test (HMT). If the HMT is passed then the relevant products are said to comprise a 'market' for the purposes of a competition enquiry. The typical formulation of this process is:

"The relevant market is usually defined by applying the hypothetical monopolist test (also known as the SSNIP test), according to which a 'market' comprises all the products and regions for which a hypothetical profit maximising monopolist would impose a Small but Significant Non-transitory Increase in Price [SSNIP]."20

A 5-10% price increase is commonly used as a SSNIP. There are many ways to conduct an HMT (or SSNIP) test.<sup>21</sup> However it is done, the goal is to focus the enquiry on the most salient sources of competitive constraint.

Drawing an inference as to elasticity, diversion or conducting an HMT requires clarity as to what the product at issue actually is. Increasingly, particularly in innovative, digitally focused industries, this can be a vexed issue. A candidate 'product' may provide many different services to many different types of customers. These services may be complementary, and their value may rely on the consumption of related services by other types of customers. To return to the recorded music example, consider a competition enquiry considering the merger of two hypothetical firms selling cassettes in 1986. <sup>22</sup> Is the product the music cassette (and so excluding Vinyl and CDs), or something broader? To what extent is portability a intrinsic feature of the relevant product (there is no analogy to the Walkman that works for a Vinyl record)? Is the content on the cassette relevant (at the time, computer software as described on cassette). Having raised these issues in the context of recorded music in 1986, consider how to focus a related enquiry in 2020, when the analogy to the cassette might be the smartphone.

The central challenge is that the extent to which the variety of features comprising a candidate product can be viewed as distinct for the purposes of a competition enquiry, shapes the way competitors will be viewed.

In some sense, this is a familiar problem. In decades past, courts grappled with questions related to 'aftermarkets' – is the printer ink cartridge separable from the printer? – and bundling – is the right shoe separable from the left shoe? And in a very real sense, most familiar products are collections of things that can often be bought separately (a car typically includes a steering wheel and some tires, both of which can be bought as individual items). The way to proceed is to ask what collection of features would

<sup>21</sup> Amended 2008 ACCC Merger Guidelines, ¶¶ 4.18–4.19; Davis, P and E. Garcés, *Quantitative Techniques for Competition and Antitrust Analysis*, (Princeton, NJ: Princeton University Press, 2010), p. 201-30

<sup>&</sup>lt;sup>20</sup> OECD. Roundtable: Market Definition. OECD Series Roundtables on Competition Policy, N° 130, 11 October 2012 at p. 11. Available at https://www.oecd.org/en/publications/market-definition\_62f0f46c-en.html accessed October 10th, 2024.

<sup>&</sup>lt;sup>22</sup> Here and elsewhere, the narrative will abstract away from much of the detail of how the recorded music business actually worked. The purpose is to use recorded music as an analogy for a broader class of industries in which innovation is important. All analogies are imperfect, but their value is in giving some grounded specificity to other abstract ideas. In that spirit, the account of recorded music is merely offered as a useful setting in which to discuss helpful illustrative hypotheticals.

compete in a market absent the conduct at issue.<sup>23</sup> This is a coherent way to formulate the products that matter in a way that allows a meaningful comparison to a "but-for" world.<sup>24</sup>

The problem, especially with new, fast evolving products, is forming a view as to what that collection of features might be. Decades of experience likely makes most economists comfortable with a presumption that a car is a relevant product when considering a hypothetical merger of Ford and Toyota. When a line of business is defined by the imagination of a software engineer, has only existed for a few years, and is deeply embedded in a network of complementarities with other business lines, inference becomes necessarily fact specific.

A closely related issue in defining the scope of competition is the relevant timeframe. Again, consider the recorded music industry in 1986. At that point in time, cassettes were unambiguously the leading format. That said, looking at the history of the industry and the likely future would provide a basis for considering the possibility that meaningful competition may well come from emergent technologies. This reflects the process of innovation in the industry. The next section grapples with these and related issues specifically.

# 4 How does competition play out in the modern economy"?

A distinguishing feature of the newer elements of the modern economy is the centrality of innovation. Often, they incorporate new technologies and products. Often, the relevant firms spend considerable resources on ongoing product development. This section considers some of the ways competition can be organized in these types of industrial settings, and some of the implications this has for competition policy. <sup>25</sup> A central observation is that, in some circumstances, competition in an innovative industry may have aspects of a winner-take-all contest (that is, competition may be primarily *for* the market, rather than *in* the market).

On contemplating the connection between the competitive conditions of an industry and innovation, Schumpter, in 1942, commented that:

"As soon as we go into details and inquire into the individual items in which progress was most conspicuous, the trail leads not to the doors of those firms that work under conditions of comparatively free competition but precisely to the doors of the large concerns . . . and a shocking suspicion dawns upon us that big business may have had more to do with creating that standard of life than with keeping it down."

A cursory glance at the largest firms in the world by market capitalization might suggest that Schumpter could defend a similar claim were he writing now. Nonetheless and famously, in 1964 Arrow famously concluded that

"The only ground for arguing that monopoly may create superior incentives to invent is that appropriability may be greater under monopoly than under competition. Whatever differences may

<sup>24</sup> In Australia, the Federal Court grappled with one manifestation of this type of issue in *ACCC v Metcash Trading Limited* [2011] FCA 967 (25 August 2011); [2011] FCAFC 151 (appeal).

<sup>&</sup>lt;sup>23</sup> In US law this is discussed in Jefferson Parish Hospital District No. 2 v. Hyde, 466 U.S. 2 (1984)

<sup>&</sup>lt;sup>25</sup> A broader survey of recent research, that covers much of this, in much greater depth, is Asker, J. and V. Nocke, "Collusion, Mergers and other Antitrust Issues." in *Handbook of Industrial Organization, Volume 5*, eds. K. Ho, A. Hortascu and A. Lizzeri, (Elsevier, New Holland 2021). pp. 177-279.

exist in this direction must, of course, still be offset against the monopolist's disincentive created by his preinvention monopoly profits."

One way to reconcile the empirical observation of Schumpeter and the theoretical point made by Arrow is to focus on the forces that shape the incentive to innovate. In considering this reconciliation, Shapiro (2012) emphasizes three elements:

- i. Contestability. An innovation gives the innovative firm a way to provide greater value to consumers. When a market is contestable, a firm's provision of greater value results in consumers being attracted to it. The degree of contestability is a function of the extent to which consumers are willing, or able, to move to the firm offering greater value. The central question is whether future sales can be contested by a disruptive innovator.
- ii. Appropriability. Innovative effort requires a reward. That is, the innovator is incentivized by their ability to appropriate at least some of the social benefit of their innovation. The extent to which an innovation is appropriable is a function of the property rights attached to the innovation (shaped by the relevant intellectual property regime), competitive conditions in the market (shaped by how dramatic the innovation is, the existence of substitutes and their likely competitive response) and the relative cost position of the innovative firm.

Contestability is about whether a innovator can attract customers, while appropriability is concerned with the risk-adjusted profits that can be expected conditional on serving those customers.

iii. Synergies. The return from innovation may be heavily shaped by the presence of supporting, complementary assets. This is related to both contestability and appropriability but is distinct in that the complementarities may arise from activity in markets that are otherwise completely unrelated.

These elements help form a framework for understanding innovative industries and ensuring that competition policy is appropriately supportive of innovative endeavour. Again, the recorded music industry provides a useful expository tool through which to discuss how these elements apply to an industry characterized by continual innovation, and so draw out some themes and challenges relevant to the administration of competition policy in these types of industries.

A threshold question when thinking about competition in recorded music is to determine the appropriate nexus of competition. Essentially, this is a question of market definition (see the earlier discussion in Section 3.2).

Consider the hypothetical problem of determining the competitive impact of a merger between two large firms supplying music on CDs in the period 1998-2002. At this time, recorded music was almost exclusively supplied in CD format.<sup>26</sup> One product definition that might be proposed to organize an investigation might be "suppliers of music CDs" or "recorded music in CD format". In 1998-2002, this

<sup>&</sup>lt;sup>26</sup> Here and elsewhere, the narrative will abstract away from much of the detail of how the recorded music business actually worked.

may seem innocuous as almost all recorded music at that time was in the CD format. While a relatively focused product definition of this sort would not preclude consideration of innovation, it pushes it to the periphery. Instead, it focuses the enquiry on the cross-sectional features of the industry at a specific point in time.

By contrast, greater prominence might be given to the recurrent cycles of innovative disruption observed in recorded music. In this framing, the product could be recorded music, irrespective of format. And, rather than emphasizing competition arising from rivalry between the most active firms at a given point in time, this framing might put relatively more weight on the consumer benefits derived from rivalry between the evolutions of technologies. That is, there would likely be comparatively more emphasis on competition *for* the market.

Of course, there is merit in both framings. The point is to note that this dimension of choice in framing the competition inquiry would likely be absent in relatively static traditional industrial settings from which the intuitions that guide competition policy are often drawn.<sup>27</sup>

In light of this, it is worth exploring the interaction between competition at a point in time, and the dynamics of competition between technologies (again, using the hypothetical merger in 1998-2002 outlined above). Consider how an analysis might proceed. First, the parties to the merger would be identified, some preliminary analysis might be done as to what they do, which firms do similar things, and some market shares might be computed. Presuming that the two merging parties had very high market shares, a serious investigation by the competition agency would be triggered. At this point, nothing related to innovation has been introduced.

More than likely, either the agency staff or the merging parties would point to the history of technological transformation in the industry and consider whether a snapshot of market shares fully captures the relevant competitive reality. The pattern of creative destruction evident in Figure 4 would likely be enough to make it hard to dismiss the claim out of hand and the interaction between 'static' and 'dynamic' competition would become relevant.

In much of the economic literature on innovation and competition, the relevant market is modelled as a winner-take-all contest (that is, competition is primarily *for* the market, rather than *in* the market).<sup>28</sup> At any given point in time, given this assumption, one firm should have a high and apparently stable market share. Nonetheless, competitive pressure is felt, due to the threat of losing the market to the next innovative disruptor. The incumbent is neither comfortable nor lazy. That is, the market shares are a consequence of competition, rather than an indicium of its absence.

Recorded music is the kind of real-world industry that this theoretical abstraction is intended to (partially) represent. For competition *for* the market to be effective, the relevant market needs to be contestable. That is, a new innovator needs to be able to capture the customers of the incumbent firms or

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<sup>&</sup>lt;sup>27</sup> It is common in discussions of the literature to hear these referred to as widget markets.

<sup>&</sup>lt;sup>28</sup> See, for an introduction to this vast literature, Reinganum, J. "The Timing of Innovation: Research, Development and Diffusion." in *Handbook of Industrial Organization, Volume 1*, eds. R. Schmalensee and R. Willig, (Elsevier, New Holland, 1989), pp. 849-908.

technologies. At least historically, Figure 4 suggests that some contestability existed in this industry (customers transitioned to new technologies relatively quickly).

While at first glance it might look like the dynamic considerations arising from innovation would serve to mitigate competition effects. In some settings, this may be an oversimplification. Innovation can confer considerable consumer benefits. When innovation is hampered, this may create considerable consumer losses. Rather than mitigating competition concerns, innovation just raises the stakes. An economist engaged in a competition inquiry in an innovative intensive industry should carefully consider the incentives of incumbents in an industry facing ongoing disruptive technological change. A change in industry structure may serve to change the returns to these activities.

Hence, in our hypothetical merger, a useful line of inquiry could be whether the merger would materially change the contestability of the market, the appropriability of innovation or the availability of complements. Of course, everything turns on the specifics of the industry. Firms often have good, procompetitive reasons for engaging in mergers and other conduct that, at times, can be considered as part of a competition inquiry. Particularly when innovation requires covering large sunk costs, reducing everything to 'big is bad' runs the considerable risk of harming competition and consumers. Indeed, while competition policy has an important role in supporting the vigour of innovation, it is also well recognized in the economic literature that poorly targeted intervention can have a stifling effect. <sup>29</sup>

It is worth further emphasizing that, in many modern industries, including recorded music, innovation, contestability, and competition generally are shaped by the relationship between the products at issue and related complementary products, technologies and actors. For downloads to be able to provide competitive pressure to CDs, it was necessary to have the internet and access to broadband. It is no accident that college students in residential dormitories were early adopters of downloading technology. They had high-quality internet access at little to no cost. Similarly, the Walkman and the car cassette player were likely important in transitioning people away from vinyl toward cassettes. In the economics literature, the relationships between complementary technologies are often cast in terms of indirect network effects, emphasizing the idea that the value of adopting one technology is determined by the extent of adoption of another.<sup>30</sup> A core concern is that competitive bottlenecks can exist outside markets that may be defined solely by reference to substitutes. Similarly, the incentive to engage in innovation can be determined by the availability of supporting complementary technologies.

Thus, in industries that increasingly characterize the modern economy, competition *for* the market, as well as *in* the market, is important. Indeed, it may well be that it is competition *for* the market that provides the bulk of the consumer benefits. Further, competition can occur within a broader ecosystem of interconnected complementary technologies and firms. The emergence of the ecosystem in shaping competition (beyond simple vertical supply chains) is an ongoing challenge in framing the relevant scope of a competition inquiry.

<sup>&</sup>lt;sup>29</sup> For a discussion, see Cabral, L. "Merger Policy in Digital Industries" *Information Economics and Policy* Vol. 54 (2021), 100866 <sup>30</sup> See Jullien, B., Pavan, A. and Rysman M. "Two-sided markets, pricing, and network effects." in *Handbook of Industrial Organization, Volume 4*, eds. K. Ho, A. Hortascu and A. Lizzeri, (Elsevier, New Holland, 2021) pp. 485-592.

# 5 What is the role of government in supporting "competition in the modern economy"?

Government has an important role in supporting competition in a market-based economy. Beyond establishing property rights and basic rules of the road (a legal system to enforce contracts, for instance), government actions can both support, and undermine, the objectives of competition policy. It is useful to start with some basic principles.

First, the modern economy is a decentralized optimization machine.<sup>31</sup> Prices coordinate allocations, incentivizing producers to distribute goods to those that are willing to meet the market price. To the extent that willingness (and capacity) to meet market prices reflects society's value of the allocation, a socially desirable feasible outcome is reached. Importantly, this process works without any centralized coordination. Rather, individual agents use the information transmitted through prices to work out what is in their individual best interest. This encourages a mind-bogglingly wide range of economic activity that incentivizes experimentation, innovation, and economic autonomy on the part of the individual economic unit.

That said, it is widely recognized in economics that the economy is imperfect as an optimizer of societal welfare. Much like a finely engineered car engine, every now and then it will need a check-up, a re-tune or a part-replacement.<sup>32</sup> It is well recognized that, in specific instances, intervention is warranted. The abuse of monopoly power is one such instance in which intervention can be justified. When considering the appropriate policy response to monopoly power, it is important to consider the costs and benefits of intervention. In many instances, the evaluation of costs and benefits starts with considering the source of the monopoly power.

When monopoly power is observed to be present in a sector of the economy, it may be due to a (potentially abused) market process, or because of market intervention by government. In both cases, the resultant monopoly power can be an obviously good thing. The police, for good reason, have monopoly power in the provision of criminal law investigations.<sup>33</sup> In others, less so.

Consideration of government action that gives rise to monopoly power is often overlooked in competition policy. It is worth recognizing that Australia has a tradition of maintaining government institutions that consider the role of government in maintaining monopoly power. The National Competition Policy (NCP), the ongoing investigations of the Productivity Commission (PC) and the Australian Competition and Consumer Commission (ACCC) are notable in this regard.

Government agencies often have monopoly power in various areas of economic activity. As noted above, the monopoly power of government in policy is likely a good thing. More serious inquiry is necessary when considering utilities and other government business enterprises. Particularly as technology advances, the economic justification for monopoly government provision of a service may change. For instance, in the modern era, email has significantly changed the importance of physical mail. The evaluation of the

<sup>&</sup>lt;sup>31</sup> See Hayek, F. "The use of knowledge in society" *American Economic Review*, Vol. 35(4), pp. 519-530. A helpful summary is contained in Arrow, K., B. D. Bernheim, M. Feldstein, D. McFadden, J. Poterba, and R. Solow "100 Years of the American Economic Review: The Top 20 Articles." *American Economic Review*, Vol. 101(1), pp. 1–8.

<sup>&</sup>lt;sup>32</sup> This is an implication of what are commonly referred to in economics as the Fundamental Welfare Theorems. See Mas-Colell, A., M. Whinston and J. Green. *Microeconomic Theory*, (Oxford, Oxford University Press, 1995) pp. 307-309.

<sup>&</sup>lt;sup>33</sup> The idea of competition between police forces is somewhat difficult to conceive. Police "firms" competing for payments made by interested parties seems unlikely to lead to good societal outcomes.

costs and benefits of a government monopoly on postal service would likely proceed differently today relative to 1974.<sup>34</sup> The scope, strength and oversight of government monopolies or quasi-monopolies is something that requires ongoing review.

Government sets many rules that shape competition in relevant markets. Well-meaning government rules can, at times, be particularly damaging to competition. Competition can be undermined for a wide range of settings, including when rules persist despite changes to the economic environment that make their initial justification irrelevant, when self-interested lobbying unduly shapes or protects the rules themselves. This is a particular risk when a cost-benefit evaluation of the societal impact of rules is not undertaken systematically, periodically and thoroughly.

Maintaining a focus on removing government rules and actions that act as a competitive constraint on economic activity is important. Anti-cartel activity by an enforcement agency like the ACCC may be undermined if the rules regulating the relevant industry substantially limit entry, impose highly standardized products, and have a professional licensing structure such that only a few people operate in the industry and are required to be in continual contact. In the alternative, removing rules that create unjustified barriers to entry means that the finite resources of an enforcement agency, again like the ACCC, can be stretched further. Lowering barriers to entry encourages self-correction (for instance via entry) when markets see a rise in monopoly power. Because the enforcement agencies see many of the worst abuses of monopoly power in the economy, they should be encouraged to consider the source of the monopoly power that is being abused, particularly when it is enduring. Where some government action is supportive of the monopoly power abuse, the agency should have recourse to refer this to a responsible department for further policy action. PC enquiries are also a rich and valuable source of these rules-related distortions.

Government policies and regulations can also significantly influence how new markets evolve. A notable contemporary example of this involves data management. In their regular operations, governments amass vast quantities of data that often have substantial commercial value.<sup>35</sup> Since data collection represents a significant fixed cost, larger companies may have an advantage in building their own databases as an alternative to accessing government-collected data. This potentially places smaller competitors at a disadvantage. Denying or limiting access to government data may, in some instances, create a competitive advantage for larger firms. Therefore, regular assessment of how governments share data with businesses and consumers could enhance competition in existing markets and encourage the development of new data-related products.<sup>36</sup>

When monopoly power arises in a setting that is not substantially related to government action, some intervention may still be warranted. The fundamental justification for this intervention should be that the existence of the monopoly power leads to distortions that undermine the integrity of price signals in the economy (and hence exacerbate resource misallocation). Since monopoly power acts to the advantage of the firm with the power, a detriment to consumers is typically used to indicate a potentially adverse abuse of monopoly power. That said, monopoly power need not lead to undesirable market outcomes. Indeed,

<sup>&</sup>lt;sup>34</sup> In no way am I suggesting that the outcome of the cost-benefit analysis would be different, but rather that the factors that would shape the analysis would be different today relative to 1974. It is unlikely email and other forms of internet-based communication would have featured prominently (or even speculatively) in an analysis done in 1974.

<sup>&</sup>lt;sup>35</sup> Collecting this data is expensive: costs are borne by both the government and the entities providing the raw information. Given this shared cost, debates as to the nature of data ownership naturally arise.

<sup>&</sup>lt;sup>36</sup> This should be balanced against other concerns, including privacy protections, cost recovery requirements, and national security.

innovation should lead to a market advantage from which a profitable return can be earned. To be incentivised to innovate and incur sunk costs and accompanying risk, a return is required.

Government has a role in mitigating the adverse effects of monopoly power in the economy. This role typically takes two forms, industry-specific regulation and economy-wide enforcement. Industry specific regulation often arises in settings where the industry tends toward a natural monopoly.<sup>37</sup> Economy-wide enforcement typically embeds broadly applicable competition principles in legislation and allows various entities to bring cases or enforcement actions based on that legislation. Industry-specific regulation and economy-wide enforcement should act as complements.

In Australia, economy-wide enforcement is the business of the Competition and Consumer Act 2010 (CCA) and much of the resources devoted to the ACCC. It is important to remember that the ACCC, while central to competition policy, is not the only entity that can bring a case alleging a contravention of the CCA. Private actions, whether undertaken on the part of an injured individual or a class of individuals, form an important part of the enforcement rubric.

The design of the economy-wide enforcement architecture is informed by basic principles of economics. In many instances, the private individual is best positioned to bring an action alleging some sort of anticompetitive action. The private individual will know the relevant industry and will be informed of the action and harm. Given an appropriate financial incentive, the individual can bring the case. In other instances, harm is more diffuse, such that no single individual has an incentive to bring the case. A class action may provide a solution to the resulting collective action problem. In other instances, especially where the harm is prospective, where s. 155-type powers are required to investigate a potential harm or the action invites criminal sanctions, an enforcement agency is best positioned to bring the action.<sup>38</sup>

Well-designed incentives are crucial for the success of the economy-wide enforcement architecture.<sup>39</sup> Enforcement agencies need to know about the potential for competitive harm before they can investigate and, if justified, seek a remedy. Mergers are a case in point. Parties to a merger are in the best position to notify the agency of the fact of the merger. Any voluntary notification process, however, runs into the immediate design problem that parties to an anticompetitive merger will have an incentive to avoid notification. While this incentive can be mitigated in a voluntary notification regime at some cost in terms of process and certainty, most jurisdictions have moved to a compulsory notification regime for mergers of meaningful size. This removes many incentives to game the system in terms of notification.<sup>40</sup> However, the structure of the review process will shape the way both the reviewing agency and the parties disclose documents, testimony, concerns as to competitive effects, relevant points of advocacy and related economic analysis. Recognizing this, on-going review of the process, guided by a cost-benefit framework is important to make sure that the regulatory burden of the process is justified by its societal return.

<sup>38</sup> s. 155 of the CCA contains compulsory information-gathering powers that enable the ACCC to obtain information, documents and evidence in relation to its enforcement functions.

<sup>&</sup>lt;sup>37</sup> See Armstrong, M., S. Cowan, and J. Vickers Regulatory Reform: Economic Analysis and British Experience, (Cambridge, MIT Press 1994).

<sup>&</sup>lt;sup>39</sup> Incentives are also important for determining the social benefits derived from private actions. An extensive literature discusses the role of treble damages, class action fees and related details of the litigation process in shaping the outcomes generated by private actions. See, for instance, Breit, W. and K. Elzinga, Antirust enforcement and economic efficiency: The uneasy case for treble damages, *Journal of Law and Economics*, Vol. 17(2), pp. 329-356.

<sup>&</sup>lt;sup>40</sup> Some opportunities for gaming remain, particularly around the notification thresholds. See Wollmann, T. Stealth consolidation: Evidence from an Amendment to the Hart-Scott-Rodino Act. *American Economic Review: Insights*, Vol. 1(1), pp. 77-94.

When thinking through the design of enforcement frameworks, it is also important to consider actors beyond the affected firms and the competition agency. Ideally, bad mergers (or bad conduct) should be blocked by legal counsel as part of their advising role. This is good for the economy and cost-efficient for the relevant competition agency. Competition agencies have an important role in supporting this 'preemptive enforcement' through the provision of guidance and by making sure that the review process is transparent. Guidance documents serve several roles, not least of which is giving a basis for legal advisors (and economists) to engage in the analyses that an agency will do and provide an early risk assessment to parties. Being able to point to public guidance helps educate business people as to the likely enforcement outcomes of a particular merger or course of conduct. Publication of the basis for enforcement actions serves a similar purpose. Principled and well-communicated decision-making helps keep bad things from happening. External review of regulatory actions (like merger retrospectives) serves a similar purpose.

Many of the observations made here with respect to economy-wide enforcement apply equally to industry-specific regulation: incentives matter, transparency is important, and ongoing review is invaluable.

### 6 Opportunities and paths forward

Australia's competition policy stands at a pivotal moment of transformation. The introduction of new merger legislation and the ongoing revitalization of National Competition Policy have laid a robust foundation for addressing competition challenges. Yet beyond these crucial reforms lies a landscape rich with opportunities for competition policy.

First, relative to 1974, several sectors of the economy may well yield notably high returns from well-targeted competition monitoring and, potentially, enforcement.

The housing market presents notable opportunities for competition policy monitoring, given its outsized impact on consumer expenditure. Competition in construction materials supply chains, real estate services, and mortgage lending markets directly affects millions of Australians' financial wellbeing. By supporting competition in these interconnected markets, policymakers can help address affordability concerns while improving service quality and market efficiency.

Similarly, the mining sector's expanded contribution to Australia's GDP suggests that maintaining attention on competition throughout its value chain could yield meaningful societal returns. From port access to equipment supplies, and from specialized labor markets to technical services, ensuring robust competition in this sector carries substantial economic benefits. The social returns from well-functioning competitive markets in mining-related industries extend beyond the sector itself, influencing broader economic productivity and national prosperity.

The digital transformation of the economy presents both challenges and opportunities for competition policy. As businesses increasingly adopt AI technologies and data-intensive practices, competition policy should be directed at ensuring that barriers to entry don't become insurmountable for new market participants. Supporting the evolution of intermediate markets that can benefit from digital delivery while maintaining competitive dynamics is likely crucial. This extends to protecting competition for the market, and so encouraging disruptive entrants, and not just focusing on competition within existing market structures.

Care-based industries represent another critical frontier for competition policy. As Australia's population ages and demand for healthcare and aged care services continues to grow, ensuring robust competition in

both output and input markets becomes increasingly important. This encompasses not only the direct provision of care services but also the markets for skilled labor and capital investment in care facilities.

Second, the ongoing global market integration offers opportunities for strategic competition policy implementation. By leveraging the market discipline that comes from international trade exposure, enforcement resources can be more effectively directed toward domestic markets for non-tradable goods and services. This focused approach allows for more efficient use of limited regulatory resources while maintaining competitive pressure across the economy.

Third, modern data analytics and research methods have transformed the potential for evidence-based policy implementation. Unlike previous decades, competition authorities now have increased access to more sophisticated tools and richer datasets that enable more grounded analyses of market dynamics and policy impacts. This enhanced analytical capability allows for more targeted and effective intervention when needed, while also supporting systematic review of policy outcomes.

Despite these new frontiers, traditional competition enforcement remains important. For instance, there is no dispute that hard-core cartel activity still occurs from time-to-time. The ACCC's ongoing efforts to detect and prevent such conduct, while perhaps less glamorous than some high-profile merger cases, can deliver substantial social benefits and should remain at the core of its mission. <sup>41</sup>

Whatever the ultimate path taken over the next decade, success will depend on maintaining strong institutional frameworks while adapting to evolving market conditions. Regular review and adjustment of priorities, based on empirical evidence and cost-benefit analysis, will ensure that competition policy continues to serve its fundamental purpose of promoting market efficiency and consumer welfare.

Looking ahead, Australian competition policy must remain flexible yet focused, innovative yet grounded in proven principles. By maintaining this balance while pursuing opportunities across various sectors, competition policy can continue to support a dynamic and efficient market economy that serves the interests of all Australians. The challenge lies not in identifying opportunities for improvement—these are abundant—but in executing a coordinated and effective response to these opportunities while maintaining core enforcement capabilities.

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<sup>&</sup>lt;sup>41</sup> For example, Barkley, A. The human cost of collusion: Health effects of a Mexican insulin cartel. *Journal of the European Economic Association*, Vol. 21(5) (2023) pp. 1865-1904, studies a cartel that operated among the four largest generic insulin manufacturers in Mexico, between 2003 and 2007. His estimates indicate a substantial and tragic increase in death causally linked to the cartel withholding insulin supply See also Asker, J. and V. Nocke, "Collusion, Mergers and other Antitrust Issues." in *Handbook of Industrial Organization, Volume 5*, eds. K. Ho, A. Hortascu and A. Lizzeri, (Elsevier, New Holland 2021). pp. 177-279 and Marshall, R., and L. Marx. *The Economics of Collusion: Cartels and Bidding Rings.* (Boston: MIT Press, 2012).