8 Wholesale prices

Key points

- The import parity price (IPP) benchmark is the fundamental basis for wholesale prices and is largely driven by the cost of refined unleaded petrol plus other costs associated with importing petrol to Australia.
- Over the four years to June 2011 the notional IPP has been shown to closely reflect the actual costs of importing.
- Throughout 2010–11, movements in wholesales prices have continued to reflect movements in the IPP, which, in turn is driven by movements in the cost of refined unleaded petrol.

8.1 Introduction

This chapter considers the wholesale sector in the Australian petroleum industry and the petrol pricing arrangements throughout the sector. Petrol pricing is examined at the point where petrol enters the wholesale sector as well as at the point where petrol moves from the wholesale sector into the retail sector.

The chapter builds on the analysis of the wholesale sector in the 2010 ACCC petrol monitoring report, focusing on wholesale pricing in 2010–11.

8.2 The wholesale sector

The wholesale sector of the petroleum industry is much like the wholesale sector operating in other industries. The main role of the wholesale sector is to distribute product from the point of production to the point of retail sale.

The four refiner-marketers along with a number of the larger independent wholesalers such as United, Neumann, Gull and Liberty trade the majority of the volume flowing through the sector.

Petrol enters the wholesale sector through two main sources:

- domestic refinery production, by the refiner-marketers
- petrol cargo imports, by both refiner-marketers and independent wholesalers.

Petrol also moves in and around the downstream industry through buy–sell transactions among the refiner-marketers. These transactions take place around Australia and allow refiner-marketers to purchase large volumes of petrol in locations where they do not operate a refinery. Buy–sell transactions also provide an opportunity for operators of a local refinery to supply other refiner-marketers who do not have a refining presence in that location.

In 2010–11, the refiner-marketers continued to supply the majority of Australia's petrol whether by refinery production or importing:

- about 77 per cent of wholesale volumes were refined domestically with 23 per cent sourced through imports (see section 3.3.2 in chapter 3)
- refiner-marketers imported around 60 per cent of total petrol imports while independent importers accounted for about 40 per cent of imports.

The four refiner-marketers supplied over 90 per cent of total supplies of petrol.

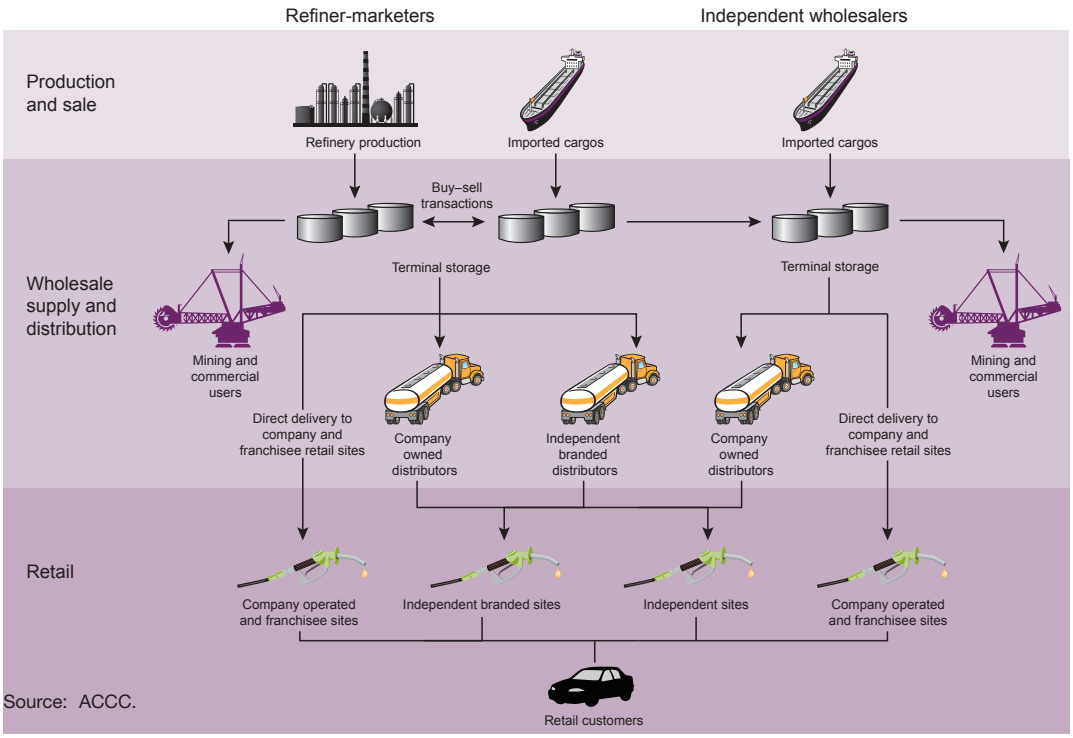
The significant rise in the share of petrol imported by independent importers from around 6 per cent in 2008–09 to around 40 per cent in 2010–11 is partly due to an overall reduction in petrol imports by the refiner-marketers during 2010–11, as well as a steady increase in volumes imported by the independents.

Petrol is distributed within the wholesale sector to supply a variety of users, including:

- independent wholesalers, who often purchase large volumes of petrol from refiner-marketers at the wholesale level to supplement any petrol they import directly
- companies and independent distributors who deliver petrol to the retail sector
- mining and large commercial entities.

As petrol moves from the wholesale to the retail sector it is distributed to a variety of retailers, including company operated and franchisee sites, independently operated branded sites and sole independent operators. Figure 8.1 illustrates the role of the wholesale sector and the flow of petrol through the industry.

Figure 8.1 Flow of petrol through sectors of the Australian petroleum industry



Source: ACCC.

8.3 Basis of wholesale prices

Wholesale prices are largely based on the costs of acquiring petrol. In Australia, the costs of acquiring petrol are most commonly observed by the costs faced by refiner-marketers or independent wholesalers to import petrol.

As the Australian market must import petrol in order to satisfy its total demand, the cost of importing petrol provides the basis for which wholesale and retail prices are determined. If the price of locally refined petrol supplies were too high, wholesalers could choose to source petrol through imports at a more competitive price.

Refiner-marketers utilise a notional cost of importing as the basis for setting wholesale and retail prices. This cost, known as the import parity price (IPP), represents the cost of importing petroleum into Australia and is a key pricing benchmark. IPP is used as the basis for pricing throughout the industry, including for price setting under buy–sell arrangements.

While IPP is an important determinant in establishing wholesale prices, it is not the only component. Wholesale prices, including Terminal Gate Prices (TGPs), are largely comprised of four main components:

- IPP
- taxes (excise and GST)
- other costs incurred at the wholesale level
- margins.

8.3.1 Import parity pricing

IPP is the notional price that a company pays to import petrol from overseas. The specific value of IPP is comprised of the individual cost of the base petrol product refined to Australian fuel standards as well as the costs associated with transporting it to Australia.

The base product price used for the pricing of regular unleaded petrol (RULP) in Australia is the Platts Singapore quote for refined unleaded petrol of 95 RON (Mogas 95).

Mogas 95 is an international price subject to supply and demand factors on the global market. It is also used as the benchmark price for petrol in other countries in the Asia-Pacific region such as New Zealand.

Other components of IPP include:

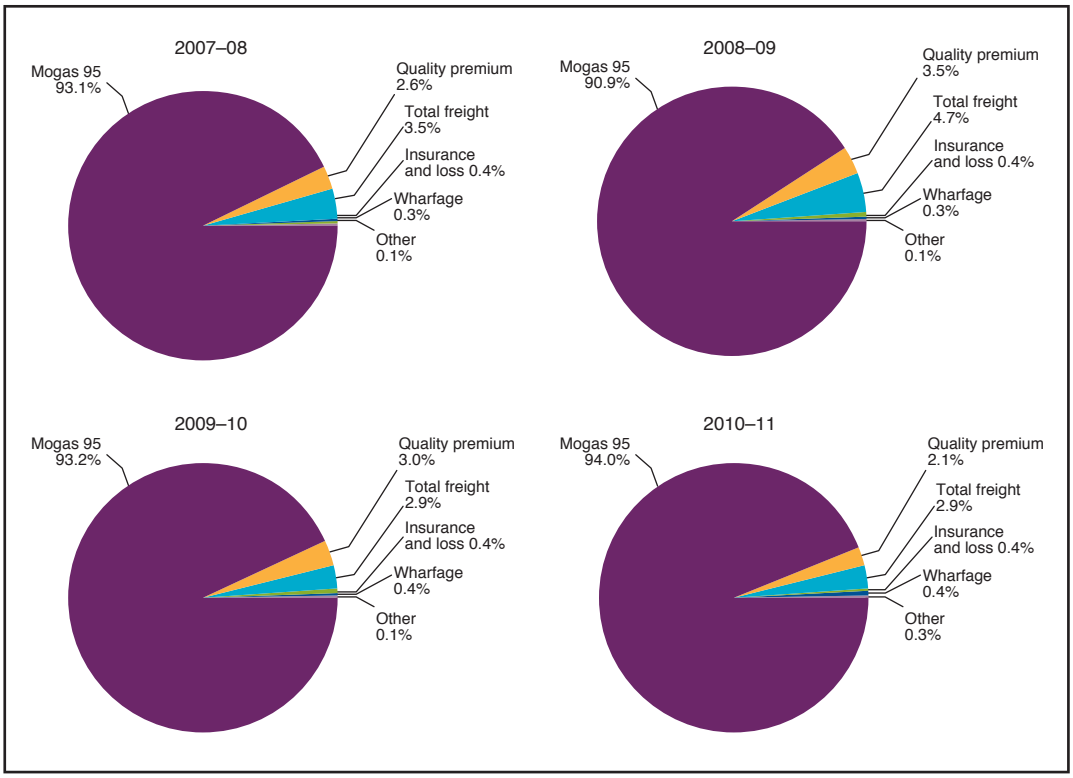
- a quality premium, accounting for the difference between the prices of fuel refined to Australian fuel standards and the specification of the refined product benchmark in Singapore
- transport costs such as freight, wharfage and other incidental costs.

The common formula used to derive the IPP for RULP can be expressed as:

IPP (RULP) = Benchmark price of refined petrol (Mogas 95) + Quality premium + Freight + Insurance and loss + Wharfage

Chart 8.1 shows that in each of the last four financial years, Mogas 95 has represented the largest component of IPP (over 90 per cent). In 2010–11, it represented 94 per cent of the annual average IPP.

Chart 8.1 Components of annual average IPP for RULP in the five largest cities: 2007–08 to 2010–11

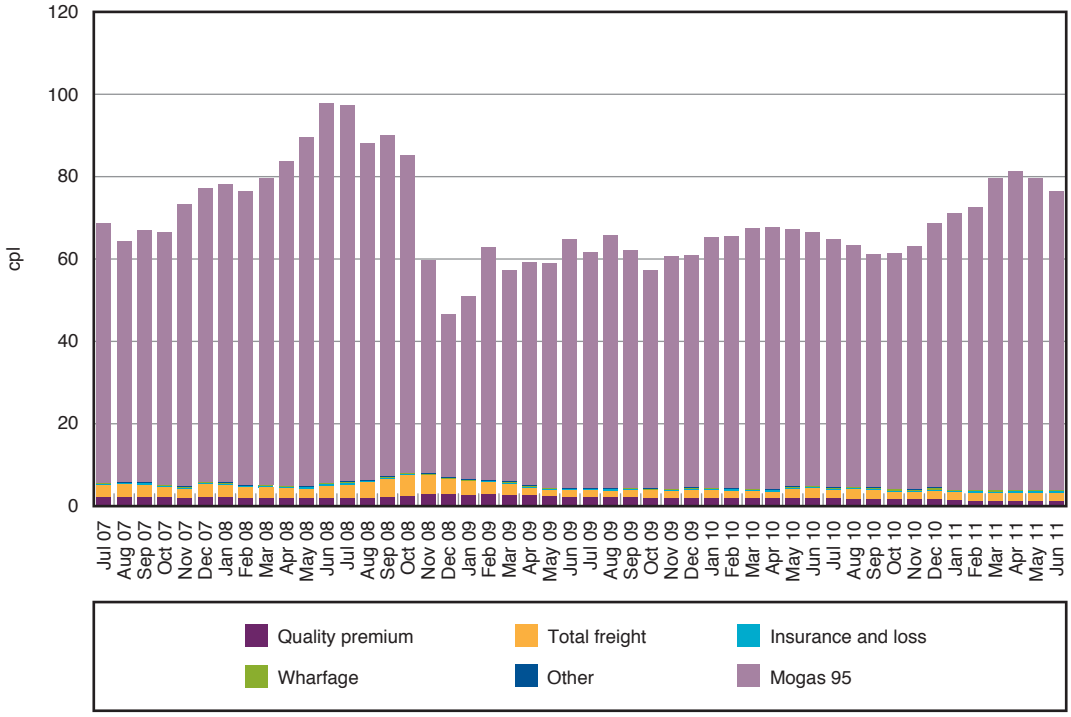


Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

Chart 8.2 shows the monthly movements in the IPP from July 2007 to June 2011. It is clear that Mogas 95 is not only the largest component of IPP, but is also the key driver of changes in the IPP and exerts an overwhelming influence on the IPP.

To give an indication of the importance of Mogas 95 in the composition of the IPP, from June to November 2008, as Mogas 95 decreased by over 50 cpl, the combined change in all other components amounted to less than 2 cpl.

Chart 8.2 Components of monthly average IPP for RULP in the five largest cities: July 2007 to June 2011



Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

Table 8.1 details the components of the IPP throughout 2010–11. Mogas 95 was highest in April 2011 at 77.23 cpl and lowest in September 2010 at 56.48 cpl.

Table 8.1 Components of monthly average IPP for RULP in the five largest cities: July 2010 to June 2011

	Exchange rate AUD = USD	Mogas 95 cpl	Quality premium cpl	Total freight cpl	Insurance and loss cpl	Wharfage cpl	Other cpl	IPP cpl
Jul 10	0.86	60.21	1.83	2.01	0.27	0.25	0.18	64.75
Aug 10	0.89	58.64	1.76	2.28	0.25	0.25	0.18	63.37
Sep 10	0.91	56.48	1.72	2.19	0.24	0.25	0.18	61.07
Oct 10	0.97	57.29	1.63	1.86	0.24	0.25	0.18	61.45
Nov 10	0.98	59.00	1.62	1.79	0.25	0.25	0.25	63.17
Dec 10	0.98	64.34	1.64	2.01	0.27	0.25	0.25	68.76
Jan 11	0.99	67.13	1.29	2.01	0.27	0.25	0.18	71.14
Feb 11	1.00	68.72	1.25	1.94	0.28	0.25	0.18	72.63
Mar 11	1.00	75.68	1.25	1.88	0.30	0.25	0.18	79.55
Apr 11	1.04	77.23	1.18	2.01	0.31	0.25	0.18	81.17
May 11	1.06	75.68	1.15	2.03	0.30	0.25	0.18	79.59
Jun 11	1.05	72.51	1.16	2.02	0.29	0.25	0.18	76.41
2010–11 average	**0.98**	**66.05**	**1.46**	**2.00**	**0.27**	**0.25**	**0.19**	**70.23**

Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

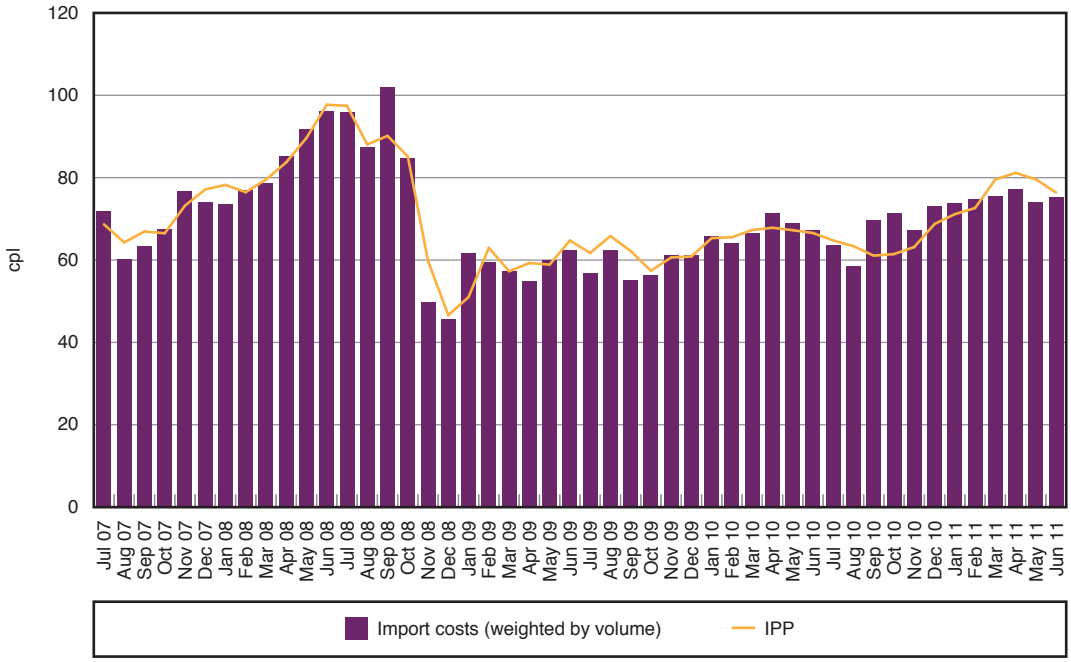
Note: The data in table 8.1, including exchange rates, is not comparable with data in table 7.5 in chapter 7 on PULP IPP data due to the fact that one refiner-marketer calculates its PULP 95 IPP differently from the others. Components shown in table 7.5 have been adjusted to reflect this.

Most of the other components have remained relatively stable, although the value of the quality premium in Australian currency has gradually decreased over the year. This is partly due to the increased fuel specifications in the other countries in the Asia-Pacific region and partly due to the fact that as the quality premium is denominated in USD, the strength of the AUD–USD exchange rate has resulted in a lower component for quality premium expressed in terms of the Australian currency.

8.3.2 IPP and actual costs of importing

As IPP represents a notional formula based on the cost of importing petrol into Australia, it is pertinent to compare it with the actual import costs faced by importers. Chart 8.3 shows IPP against actual import costs for RULP that were paid by refiner-marketers and independent wholesalers who imported RULP over the four years to June 2011.

Chart 8.3 Monthly average import costs and IPP for RULP in the five largest cities: July 2007 to June 2011



Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process .

In general, the IPP appears to have moved in line with actual import costs, despite occasions where the observed import costs have deviated slightly from IPP in the short-term. Small deviations are compounded by a number of factors, including payment timings for import cargoes, exchange rate movements and, particularly through 2010–11, a smaller than usual number of import transactions in a given month.

Overall, over the four years to June 2011 the difference between IPP and observed imports costs has been, on average, less than 1 cpl.

A more extensive analysis of IPP is available in chapter 6 of the 2009 ACCC petrol monitoring report as well as in a report by McLennan, Magasanik and Associates reviewing the appropriateness of using IPP in Australia. Both references are available from the ACCC website.

8.3.3 Pricing of buy–sell transactions

In locations where a refiner-marketer does not operate a refinery, it is faced with three supply options:

- import petrol
- transport petrol from the refinery it operates in another location
- obtain petrol from a refinery in the local area, operated by a different refiner-marketer.

Often the most efficient method of accessing local supplies where a refiner-marketer does not operate a refinery is to purchase it from a local refiner-marketer. Refiner-marketers buy and sell refined petrol with each other through buy–sell arrangements. Refiner-marketers facilitate this buying and selling of petrol through six-monthly agreements outlining the volumes they intend to buy and sell in each location.

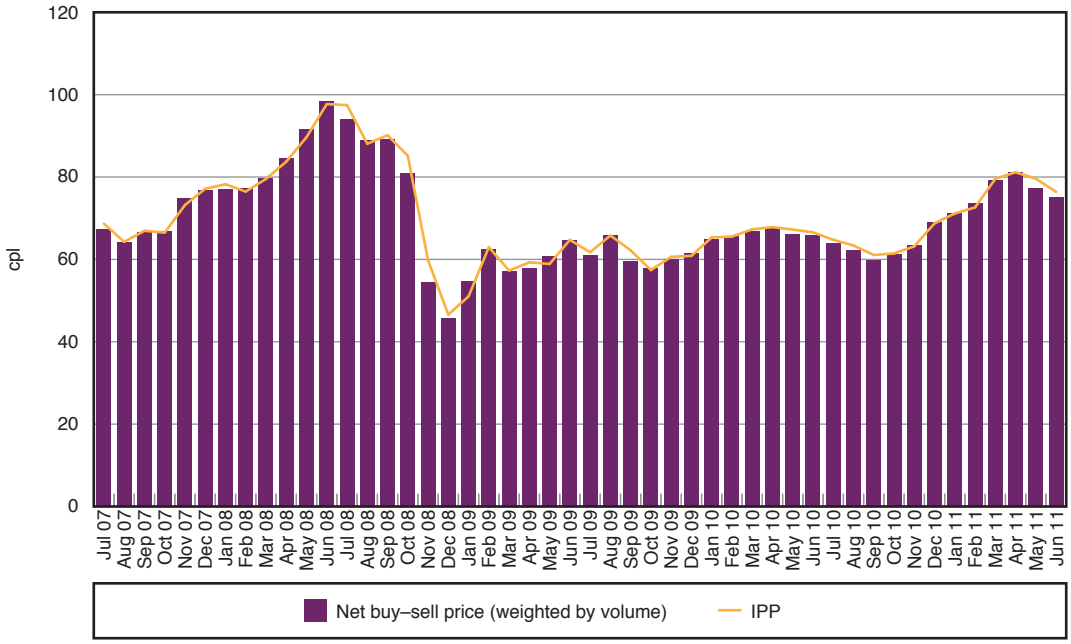
The price at which petrol is traded under buy–sell arrangements also impacts on wholesale prices. Generally, prices at which buy–sell transactions take place are based on IPP. If prices were substantially higher than IPP, a refiner-marketer could choose to import petrol at the lower cost of importing.

Concerns had been raised in the 2007 ACCC petrol inquiry report about the exclusive nature of buy–sell agreements, as independent wholesalers are not privy to such arrangements. The ACCC's 2009 petrol monitoring report found that while arrangements may have had the potential to lessen competition, there was insufficient evidence to support a conclusion that the arrangements contravened the *Trade Practices Act 1974* (since replaced by the *Competition and Consumer Act 2010*).

Since 2009, further evidence has shown that buy–sell prices and IPP have tracked each other very closely, indicating that prices at which buy–sell transactions take place are competitive with the notional costs of importing.

Chart 8.4 illustrates that over the four years to June 2011 buy–sell prices (exclusive of taxes) have tracked closely with the IPP.

Chart 8.4 Monthly average net buy–sell prices and IPP for RULP in the five largest cities: July 2007 to June 2011



Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

8.3.4 Terminal gate prices

Terminal gate prices (TGPs) are spot prices at which petrol can be bought on demand from a refinery or terminal. As most wholesale transactions occur under contract (or other negotiations) few transactions actually occur at the terminal gate, and at the specific TGP.

TGPs are, however, a useful indicator for analysing movements in average wholesale prices. Each refiner-marketer and other independent wholesalers publish their TGPs online according to the provisions in the Oilcode.

TGPs are determined with reference to the IPP and by adding tax components, other operating costs incurred at the wholesale level and a wholesale margin.

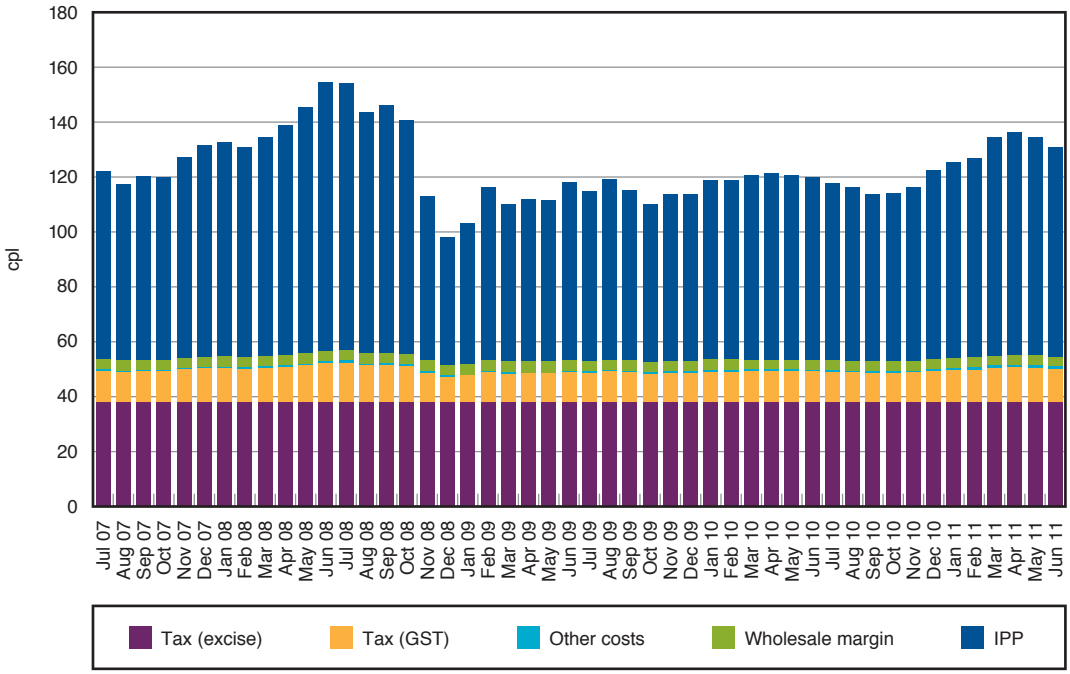
The common formula used to derive TGPs can be expressed as:

TGP = IPP + Excise + GST + Wholesale margin + Other operating costs

Chart 8.5 shows the components of the monthly average TGPs for RULP in the four years to June 2011. IPP is clearly the largest component of TGP and is the key contributor to changes in TGP.

Just like IPP, the vast majority of the price movements in TGPs are also a result of movements in the price of the underlying Mogas 95, as the other significant component, taxes, are relatively stable over time.

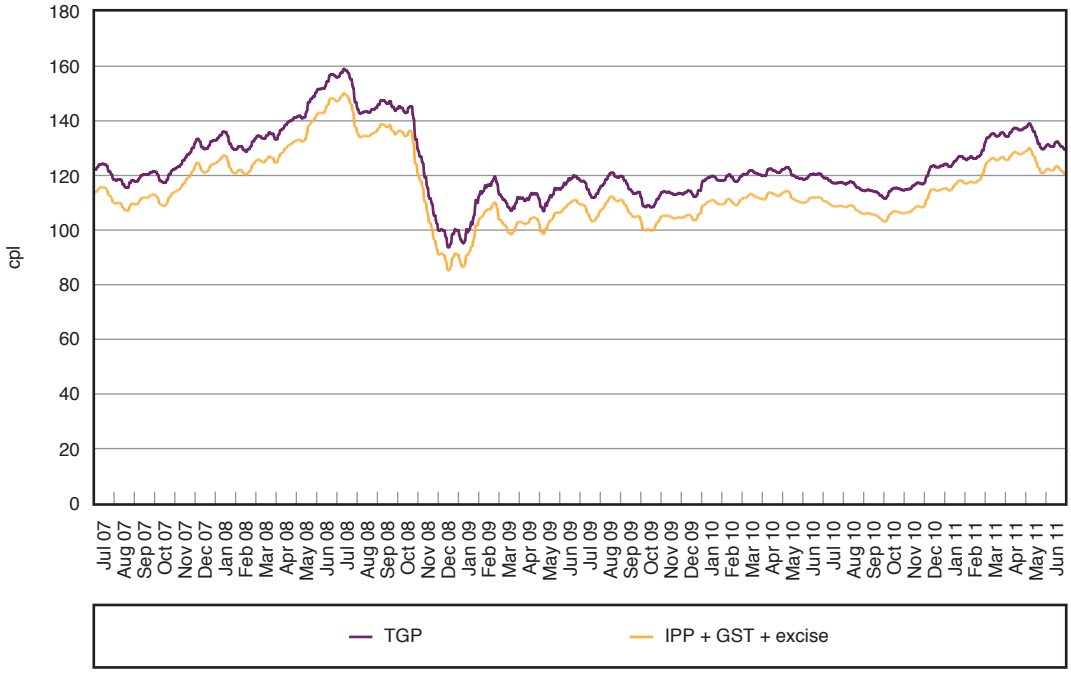
Chart 8.5 Components of the annual average TGP for RULP in the five largest cities: July 2007 to June 2011



Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

Chart 8.6 shows movements in TGPs and IPPs (with taxes). Over the four years to June 2011 TGPs have consistently tracked IPPs closely. The difference between the two price benchmarks is a combination of other operating costs incurred at the wholesale level and a margin.

Chart 8.6 Daily average adjusted IPP (including taxes) and TGPs for RULP in the five largest cities: July 2007 to June 2011



Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

Note: The IPP has been notionally adjusted for excise and GST to allow a comparison with TGP, which includes taxes.

8.4 Relationship between wholesale prices and their benchmarks

Comparing IPP with TGP and actual wholesale prices paid throughout the market provides an indication of the extent to which wholesale prices reflect notional import costs.

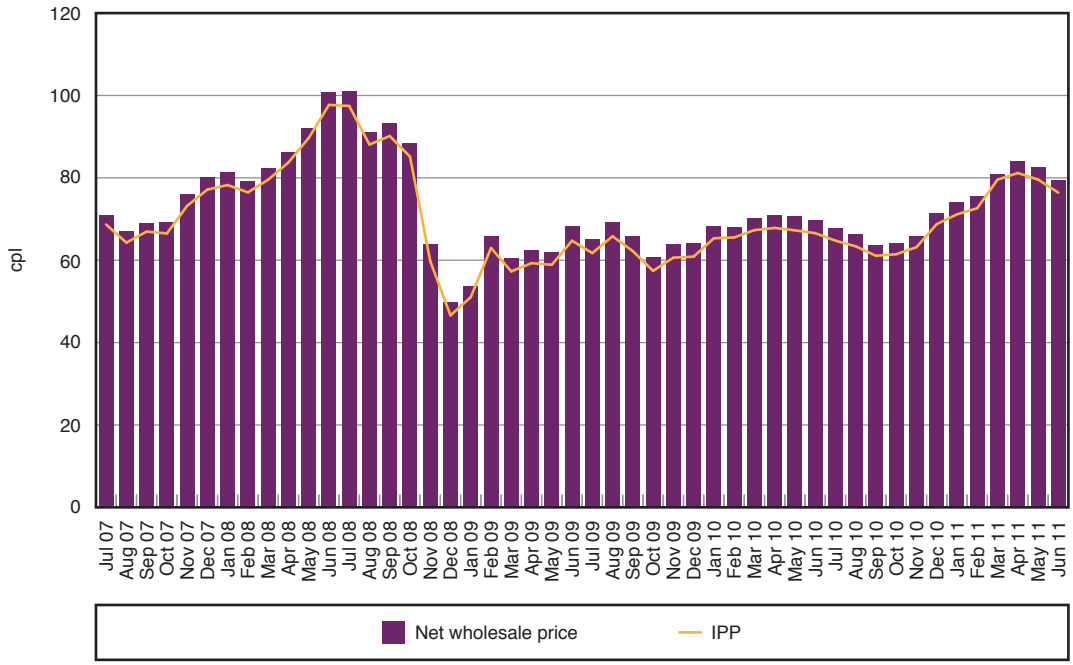
Details of transactions between refiner-marketers and their wholesale customers, including wholesale prices actually paid, have been collected from the four refiner-marketers over the four years to June 2011. Wholesale customers of the refiner-marketers include other wholesalers, resellers and distributors, large commercial customers and retail outlets. In total, details on about 4.5 million wholesale transactions have been collected and analysed since the commencement of the monitoring program.

8.4.1 Wholesale prices and IPP

As IPP is a pivotal pricing benchmark, and bears a strong relationship with actual import costs, the degree to which wholesale prices reflect IPP provides an indication of how closely costs translate into wholesale prices.

Chart 8.7 shows monthly average net wholesale prices (exclusive of taxes) and IPP for RULP in the five largest cities. Similar to previous analysis, IPP has consistently shown a close relationship with wholesale prices in 2010–11.

Chart 8.7 Monthly average net wholesale prices and IPP for RULP in the five largest cities: July 2007 to June 2011



Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

Note: Wholesale prices have been notionally adjusted to exclude excise and GST to allow a comparison with IPP, which excludes taxes.

The difference between net wholesale prices and IPP is accounted for by operating costs for storage and local transportation and a profit margin for wholesalers. The differential appears to have remained relatively constant over the four-year period examined.

Table 8.2 shows the differentials between net wholesale prices and IPP across the five largest cities in 2010–11. Sydney experienced the smallest differential at 1.5 cpl. The largest differential occurred in Melbourne with Brisbane, Adelaide and Perth averaging around the middle.

Table 8.2 Annual average net wholesale prices and IPP for RULP in the five largest cities: 2010–11

	Net wholesale price cpl	IPP cpl	Difference cpl
Sydney	72.0	70.5	1.5
Melbourne	73.2	70.3	2.9
Brisbane	72.5	70.1	2.4
Adelaide	72.7	70.5	2.2
Perth	72.0	69.7	2.3

Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

Note: Wholesale prices have been notionally adjusted to exclude excise and GST to allow a comparison with IPP, which excludes taxes.

8.4.2 Wholesale prices and TGP

Movements in gross wholesale prices can be compared with the TGP benchmark to show how actual wholesale prices reflect spot wholesale prices made available to the public.

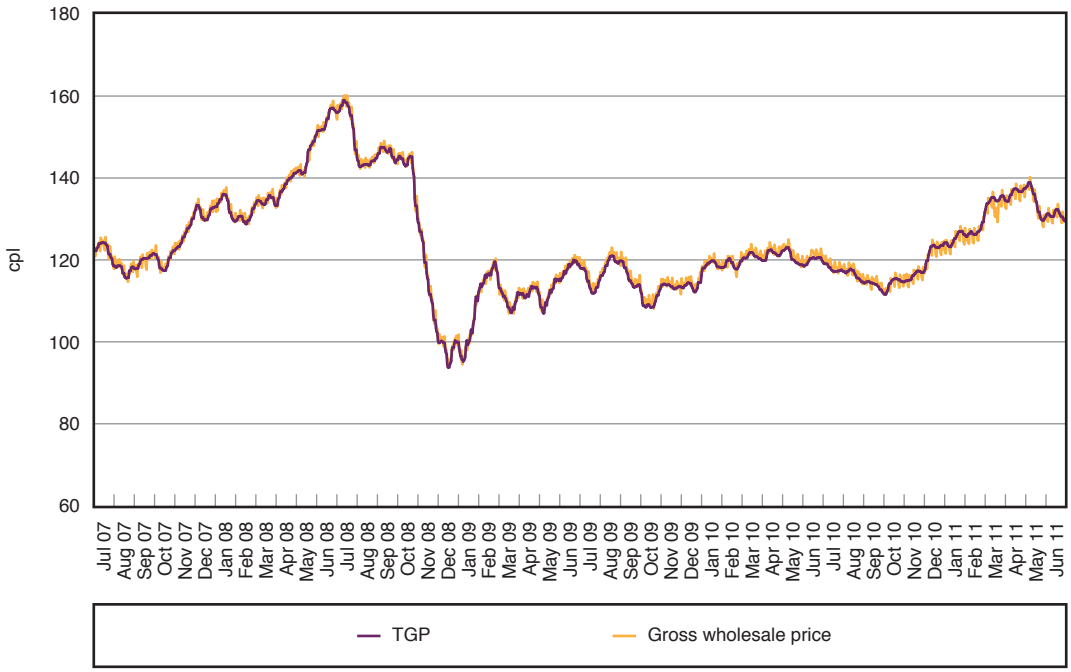
As seen earlier in the chapter, movements in TGP closely mirror movements in IPP.

Chart 8.8 tracks daily average gross wholesale prices for RULP with TGP across the five largest cities. As was the case with IPP, TGP also bears a close relationship with wholesale prices that were actually paid to the refiner-marketers.

On a daily basis, this relationship varies as practical arrangements for purchasing fuel from the wholesale sector differ among companies. Some companies only purchase petrol while others also purchase a delivery service, branding and other services associated with petrol retailing.

Overall, however, the movements of wholesale prices and TGP are closely aligned.

Chart 8.8 Daily average wholesale prices and TGPs for RULP in the five largest cities: July 2007 to June 2011



Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

Table 8.3 shows the differentials between gross wholesale prices and TGPs across in the five largest cities in 2010–11. As was the case with IPP, Sydney shows the smallest differential while Melbourne and Brisbane experienced the largest differences.

Table 8.3 Annual average gross wholesale prices and TGPs for RULP in the five largest cities: 2010–11

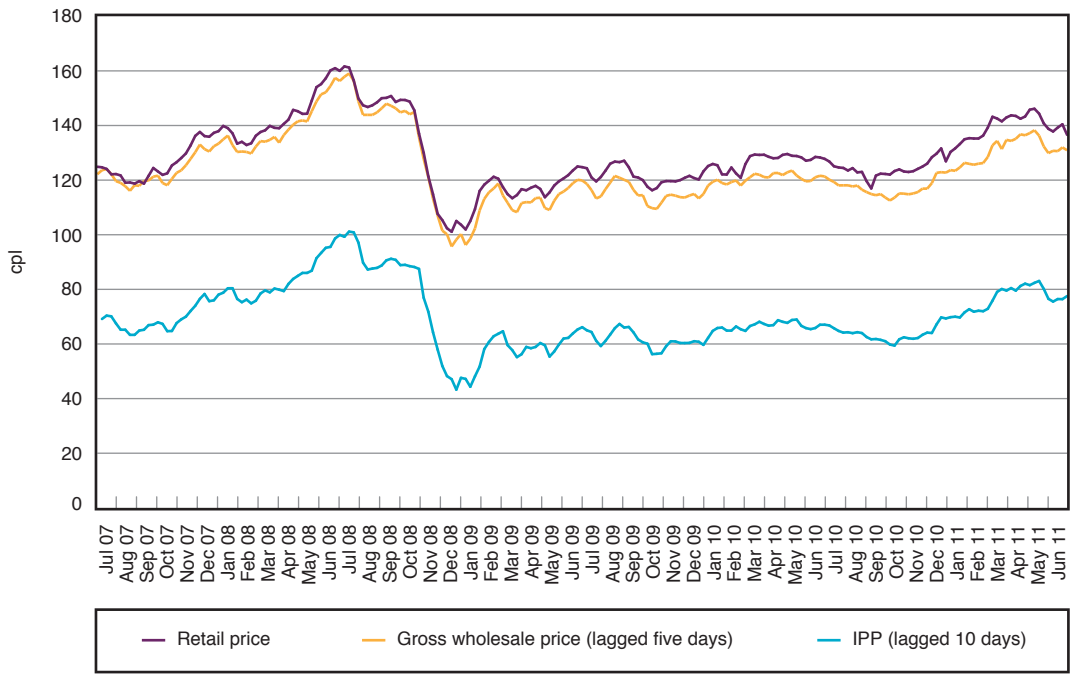
	Gross wholesale price cpl	TGP cpl	Difference cpl
Sydney	123.4	124.1	–0.7
Melbourne	124.6	123.6	1.0
Brisbane	124.5	123.8	0.7
Adelaide	123.8	124.1	–0.3
Perth	124.7	124.8	–0.1

Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

8.5 Wholesale and retail prices

This chapter has examined the role and significance of IPP as the pricing basis for wholesale prices. The subsequent relationship between wholesale prices and retail prices is considered in chart 8.9, which shows average weekly retail prices for RULP alongside lagged IPP and gross wholesale prices (that is including tax) in the five largest cities over the four years to June 2011.

Chart 8.9 Weekly average IPP, gross wholesale prices and retail prices for RULP in the five largest cities: July 2007 to June 2011



Source: ACCC analysis based on data obtained from firms monitored through the ACCC's monitoring process.

The key characteristic of the relationship observed between wholesale prices and the IPP and TGP is also evident in the relationship between wholesale prices and retail prices. Chart 8.9 shows that retail prices track movements in wholesale prices closely. The additional premium of retail prices over wholesale prices represents a combination of costs incurred at the retail level as well as a margin.

It appears that the differential between wholesale and retail prices has increased since early to mid 2009. This can be partly explained by the removal of Queensland and New South Wales fuel subsidies in July 2009 but may also reflect an increase in retail margins. Gross indicative retail differences are considered further in chapter 9. Neither the differential shown in chart 8.9 nor the gross indicative retail differences considered in chapter 9 are measures of financial performance. Chapter 15 examines the financial performance of the wholesale and retail sectors.

8.6 Key observations on wholesale prices

Previous ACCC petrol monitoring reports have found that since July 2007 wholesale prices of RULP have tracked movements in the IPP pricing benchmark.

Over 2010–11, IPP has continued to be the basis for setting wholesale prices in the Australian petrol industry. Movements in wholesale prices have overwhelmingly reflected movements in the IPP. Prices established under buy–sell arrangements also closely reflect the IPP.

In turn, IPP appears to reflect the actual costs associated with importing petrol into Australia and is predominantly driven by the price of Mogas 95, the benchmark base product for refined unleaded petrol in Australia.

Wholesale prices also show a strong relationship with publicly available TGPs.