

# AUSTRALIA

HISTORY	<ul style="list-style-type: none"> <li>• 1791: importation of vine cuttings from Cape of Good Hope to Sydney</li> <li>• <b>1820-40: commercial viticulture established</b> in New South Wales, Tasmania, Western Australia, Victoria and finally South Australia. All from <i>Vitis vinifera</i> plantings (i.e. no native vines) brought from Europe by immigrants</li> <li>• 1870-1930: <b>South Australia</b>, thanks to the irrigation along the Murray River, booming for fortified &amp; Phylloxera in other regions <b>overtakes Victoria and New South Wales to make ¾ of the country's wine production</b>. Exports of fortified wines and alcoholic reds to the UK &amp; Europe.</li> <li>• <b>1950s: introduction of stainless steel cold fermentation</b> (whites); red wine demand booming</li> <li>• <b>1970s: introduction of wine cask</b>, rise of boutique wineries, white demand booming</li> <li>• <b>Since mid-1980s: export boom &amp; vineyard overhaul</b> w rapid rise of premium international varieties e.g. Chardonnay, Merlot, etc. at the expense of non-premium &amp; multipurpose varieties e.g. Trebbiano.</li> </ul>		
CLIMATE & WEATHER	<ul style="list-style-type: none"> <li>• Various climates from cooler, maritime climates along the coasts (e.g. Port Philip, Margaret River, Tasmania) and hotter drier climates inland (Murray Darling, Riverina, etc.)</li> </ul>		
SOILS & TOPOGRAPHY	<ul style="list-style-type: none"> <li>• <b>Various soils</b> w research undertaken to measure impact of soil on wine</li> <li>• <b>Coonawarra: terra rossa</b> i.e. chocolate-brown sandy loam surface w limestone bedrock.</li> </ul>		
GRAPE VARIETIES	<table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 50%;"> <p><u>Reds</u> (58% of plantings)</p> <ol style="list-style-type: none"> <li><b>Syrah/Shiraz (25% of all plantings)</b> <ul style="list-style-type: none"> <li>- First introduced to Australia in 1830s</li> <li>- Needs heat but relatively productive &amp; disease resistant</li> <li>- Loses aroma &amp; acidity when yields increase</li> <li>- Hi proportion of anthocyanins (i.e. dark colour) -&gt; responds well to oak maturation when grapes really ripe.</li> <li>- Best in Mc Laren Vale &amp; Barossa w rich, ripe, robust reds</li> <li>- 80-150yr old bush trained ungrafted vines in New South Wales, Victoria and South Australia</li> </ul> </li> <li><b>Cabernet Sauvignon (16% of all plantings)</b> <ul style="list-style-type: none"> <li>- Progeny of Cab Franc &amp; Sauv Blc</li> <li>- Believed to have emerged as a spontaneous crossing in the Bordeaux vineyards in the 18<sup>th</sup></li> <li>- Small-sized berries w concentrated phenolics</li> <li>- Ageing potential and affinity for oak</li> <li>- Deep coloured, tannic full-bodied wines w blackcurrant aromas</li> <li>- Does best in cool climate Coonawarra and Margaret River but also in warmer areas e.g. Clare valley, Barossa, Mc Laren vale.</li> </ul> </li> <li><b>Merlot (6%)</b> <ul style="list-style-type: none"> <li>- Early flowering (-&gt; colour risk), prone to rot</li> <li>- Responds better to damp, cool soils that retain moisture. 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VITICULTURE	<ul style="list-style-type: none"> <li>• <b>170,000ha</b></li> <li>• Most vineyards wire trained for ease of pruning &amp; machine harvesting (cheap viticulture cost). At the forefront of trellising and canopy management. Top grafting to allow quick change.</li> <li>• Low vine densities</li> <li>• No phylloxera ever in South Australia, Western Australia, Tasmania, most of New South Wales and Riverland</li> <li>• Harvest between February &amp; April, May in cooler regions</li> <li>• Key hazards: climate change (searing sunshine, severe frosts), fires</li> </ul>
WINEMAKING	<ul style="list-style-type: none"> <li>• Very modern winemaking equipment &amp; techniques</li> <li>1. <b>Whites: anaerobic winemaking</b> <ul style="list-style-type: none"> <li>- Use of SO<sub>2</sub> + night harvest to preserve picked fruit from oxidation</li> <li>- Use of cultured yeast dominate</li> <li>- Tartaric acid usually added during fermentation but chaptalisation forbidden</li> <li>- Cool fermentation 12-14C + invert vessels &amp; gas + MLF usually avoided to preserve aromatics</li> <li>- Oak treatment frequent for Chardonnay (chips, staves in tank, barrel fermentation &amp; ageing)</li> </ul> </li> <li>2. <b>Reds</b> <ul style="list-style-type: none"> <li>- Normally fermented at 22-28C in stainless steel (Pinot Noir in open top fermenters)</li> <li>- Pumping over and rotofermenting to achieve tannins &amp; colour required</li> <li>- Limited post-fermentation maceration (≠Europe/US); MLF straight after fermentation for more stable wine</li> <li>- French oak for premium wines (i.e. Pinot Noir &amp; Cabernet Sauvignon), American oak for Shiraz. Oak chips for cheaper wines</li> <li>- Gentle filtration via centrifuges followed by diatomaceous earth filtration to avoid stripping too much flavour</li> </ul> </li> <li>• <b>Australian Wine Research institute:</b> <ul style="list-style-type: none"> <li>- Wine research organisation owned and led by the Australian wine industry; south-east of Adelaide</li> <li>- Created in 1955 it researches wine composition, quality and sensory characteristics, industry devt &amp; support and coordinating oenological activities and information</li> <li>- Examples: management of wine and oxygen at different stages or identification &amp; control of mouthfeel components in wine</li> </ul> </li> </ul>
WINE LAWS	<ul style="list-style-type: none"> <li>• Legal framework for regions and labelling since 1994 with 3 levels: <ol style="list-style-type: none"> <li>1. Zone: area without any specific qualification e.g. Southeastern Australia super zone 95% of vineyards</li> <li>2. Region: single land parcel w min 5 vineyards of min 5ha owned by 5 different landowners w min 500t of grapes/yr</li> <li>3. Sub-region: region w homogeneity in grape growing attributes</li> </ol> <ul style="list-style-type: none"> <li>➔ ≠ appellation system as does not specify grapes, methods or wine styles</li> </ul> </li> <li>• <b>85% labelling rule:</b> 85% of vintage, 85% of region and 85% of varietal stated</li> </ul>
KEY REGIONS & CHARACTERISTICS	<ol style="list-style-type: none"> <li>1. <b>Western Australia</b> <ul style="list-style-type: none"> <li>○ Largest state in size, 3% of total production but 30% of awards; high quality wine area w h prices</li> <li>○ Most of the vineyards concentrated in the south-western corner around Perth. Key zones: west to east</li> <li>○ Key zones: <ul style="list-style-type: none"> <li>▪ <b>Greater Perth zone</b> <ul style="list-style-type: none"> <li>- North &amp; south of Perth along the coast on the west and the Darling range 50km inland</li> <li>➢ <b>Swan valley region</b> <ul style="list-style-type: none"> <li>▫ Very hot climate w dry summer; one of the hottest climate in Australia</li> <li>▫ Historic region: where first Western Australian vines were planted in 19<sup>th</sup> by T. Waters &amp; S. Roe</li> <li>▫ Dominated by Houghton (part of Hardy's) but has significantly lost importance since 80s</li> </ul> </li> </ul> </li> <li>▪ <b>South West Australia zone</b> <ul style="list-style-type: none"> <li>- Directly south of Great Perth zone; covers the south-western coastal tip of country</li> <li>➢ <b>Margaret River region – 5,500ha</b> <ul style="list-style-type: none"> <li>▫ Part of the South-west zone which covers the south-western tip of country; 200km south of Perth</li> <li>▫ Maritime climate with dry, warm summers (only 200mm in growing season) and wet winters (1160mm). Cool air brought by Atlantic to temper conditions. // dry vintage in Bordeaux.</li> <li>▫ Small creeks and gentle valleys w gravelly or gritty sandy loam soils</li> <li>▫ Viticultural hazards: strong winds in Spring (flowering disruption) and salt in water (-&gt; irrigation essential)</li> <li>▫ Top quality Bordeaux blends and Cabernet; elegant Chardonnay &amp; herbaceous Sémillon</li> <li>▫ Key producers: Foster's Devil's Lair (1.8m btls), LVMH's Cape Mentelle (1.4m btls) &amp; Vasse Felix (1m btls)</li> </ul> </li> <li>➢ <b>Great Southern region</b> <ul style="list-style-type: none"> <li>▫ 150km east of Margaret river;</li> <li>▫ Cool climate; more continental inland</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> <p>Widely spread and young vineyard area (-&gt; experimentation)</p> <ul style="list-style-type: none"> <li>▫ Full bodied Cabernet Sauvignon, peppery Rhone-like Shiraz and pure fruit Riesling</li> <li>▫ Key sub regions: <i>Frankland river</i> and <i>Mount Baker</i></li> <li>➢ <b>Pemberton region</b> <ul style="list-style-type: none"> <li>▫ Directly east of the Great Southern region, along the coast &amp; inland. Very large area in size.</li> <li>▫ Cool climate, relatively high rainfall and varied soils</li> <li>▫ Good Pinot Noir &amp; Chardonnay; fine Verdelho on warmer sites.</li> </ul> </li> </ul> <ol style="list-style-type: none"> <li>2. <b>South Australia – 73,000ha - 43% of production</b> <ul style="list-style-type: none"> <li>○ Phylloxera-free area thanks to strict quarantine on vineyard material and machinery from out of state</li> <li>▪ <b>Lower Murray zone – 25% of production</b> <ul style="list-style-type: none"> <li>➢ <b>Riverland region -22,000ha</b> <ul style="list-style-type: none"> <li>▫ Area 150km north-east of Adelaide; along the Murray river; largest wine producing region in Australia</li> <li>▫ Hot continental climate w low rainfall and little risk disease. Viticulture only possible thanks to irrigation from river Murray.</li> <li>▫ Extensive and modern viticulture for fruity bulk wine made from Chardonnay and most red grapes</li> <li>▫ Home to Constellation wines; most big producers source grapes from here</li> </ul> </li> </ul> </li> </ul> </li> </ol> </ol>

- **Barossa zone**
  - Original heartland of South Australia's wine industry with arrival of English & German immigrants in early 19<sup>th</sup>. Barossa was home to the then biggest South Australian: Seppelt – 50% of the South Australia's crush
    - **Barossa valley region**
      - 50km north-east of Adelaide; one of the oldest wine region in Australia
      - Hot continental climate w long dry summers (-> irrigation often used)
      - Limestone and ironstone soils
      - Shiraz most planted grape including some very old bush vines. Grenache, Cab Sauv & Mataro too.
      - Acidification, short maceration, reverse osmosis (to reduce alcohol) & American oak ageing common.
      - Classic Barossa Shiraz is full bodied, soft & spicy w leather aromas developing w age.
      - Dominated by large wineries e.g. Penfold's, Yalumba, Peter Lehman (7.8m btls), Wolf Blass winery
    - **Eden valley region**
      - Hills directly east of Barossa
      - Best known for high quality, medium bodied, dry-off dr, hi acidity Rieslings w lime & lemon flavours that develop into honey, petrol & toast w age.
      - Predominance of small wineries e.g. Henschke (founded in 1868; ½m btls)
- **Fleurieu Peninsula zone**
  - Relatively small zone covering the peninsula south of Adelaide & facing Kangaroo island.
    - **Mc Laren Vale region**
      - Small region on the coast, 30km south of Adelaide; vines first planted in 1838 by Thomas Hardy.
      - Mediterranean climate with dry warm summer w some cooling ocean breezes.
      - Vineyards at the foothills of the Mount Lofty range, about 100-300m hi. Sandy, clay & terra rossa soils
      - Key grapes are Shiraz (50% of plantings), Cabernet Sauvignon, Chardonnay, old-vine Grenache
      - Full bodied, soft & juicy reds from family-run & boutique wineries e.g. D'Arenberg (3.2m btls), Wirra Wirra.
    - **Langhorne creek region**
      - Warm region east of Mc Laren vale, on the other side of the Mount Lofty range (i.e. sheltered)
      - Produces earthy full bodied Shiraz & Cabernet Sauvignon.
- **Mount Lofty Ranges zone**
  - Large area directly north of Adelaide
    - **Clare Valley region**
      - Small region 150km north of Adelaide; one of the oldest wine region
      - Moderate continental climate w dry summer (-> irrigation) & hi diurnal range (vineyards up 400-500m) Most of the 630mm rainfall in the winter. Various types of soils
      - Riesling is the key grape w austere whites
      - 40 wineries including Tim Adams, Jim Barry, Grosset. Represents 2% grape crush, 7% of awards
      - 1983 Ash Wednesday: 5,000ha of vines destroyed by bush fire. Rail tracks now Riesling cycling trail
    - **Adelaide hills region**
      - Located east of Adelaide, along the Mount Lofty range surrounded by Mc Laren Vale, Barossa, Eden valley. Cool climate region despite warm growing season
      - Specialises in elegant Chardonnay with hi acidity and nectarine & lemon flavours. Sauv Blc too.
      - Also produces base for sparkling wine production, Cabernet Sauvignon, Shiraz & Sémillon
      - Producers include Shaw & Smith, Petaluma
- **Limestone coast zone**
  - Zone south of the Lower Murray zone; 400km south-east of Adelaide; bordering w Victoria
  - Moderately cool climate influenced by ocean currents.
    - **Coonawarra**
      - 380km from Adelaide; south of Padthaway; 30km<sup>2</sup> large; 60km inland.
      - Maritime-influenced climate not dissimilar to Bordeaux although drier growing season.
      - Key viticultural hazards: possible under-ripeness problems along w spring frost, rain
      - First region in Australia to have its own terroir i.e. red terra rossa over limestone
      - Top quality Cabernet Sauvignon w plum & blackcurrant fruit aromas.
      - Chardonnay, Riesling and Sauvignon blanc suit the limestone soils well.
      - Big companies e.g. Foster's Wynns (900ha/3.6m btls) & smaller wineries e.g. Balnaves of Coonawarra
    - **Padthaway region**
      - Thin strip of land north of Coonawarra w warmer climate
      - Chardonnay & Shiraz dominate w richer fruit flavours.

### 3. Victoria

- 3<sup>rd</sup> most important wine state; 600+ producers, mainly small boutique wineries; viticulture key to local industry
- First vines planted in 1850s but expansion crushed by Phylloxera (Geelong in 1875)
- Split in two by the Great Divide range: north of it warm & dry; south (coast) wet and cool
- Shiraz & Chardonnay dominate overall but signature wines across the 21 designated regions:
  - **North-west Victoria zone – 177,000ha /33% of production**
    - Eastern continuation of Lower Murray zone along the Murray river.
      - **Murray Darling region**
        - Large irrigated estates dominate this flatland. Large quantities of healthy fruit for bulk wine production.
  - **Western Victoria**
    - Large area south of North-west Victoria; west of Melbourne
      - **Grampians region**
        - Located at the end of the Great Dividing range; limestone-rich soils
        - Recognised for excellent sparkling wines (incl. Shiraz) along with powerful, tannic still Shiraz
        - Key producers include Mount Langhi (1.2m btls; Billi Billi Shiraz)
      - **Pyrenees region**
        - East of the Grampians; 120km northwest from Melbourne; rolling hills
        - Full bodied reds (Shiraz & Cabernet) and fine Chardonnays. Dalwhinnie, small top producer

- **Central Victoria zone**
  - Directly east of the North-West & Western Victoria; produces strong reds
    - **Bendigo region**
      - 100km north of Melbourne; historically part of Heathcote
      - Red wine country with extravagant Shiraz and Cabernet wines.
    - **Heathcote region**
      - Temperate climate; 500 million years old Cambrian soils
      - Produces some deep coloured, hi alcohol, ripe but velvety Shiraz
    - **Goulburn valley region**
      - Directly east/north-east of Bendigo; divided by Goulburn river
      - Oldest continuously producing Victorian wine region
      - Main grapes from Rhone along with Cabernet Sauvignon, Chardonnay and Riesling
      - Shiraz and Cabernet have rustic, chocolate, dusty, red berries and baked earth aromas.
      - Key producers: Tahbilk (founded in 1860, renowned for Marsanne & old Shiraz vines); Mitchelton wines
- **North-east Victoria zone**
  - **Rutherglen region**
    - Small area north of the Victoria state bordering with the Big Rivers zone
    - Continental climate w warm summers and moderate evenings; low rainfall & spring frost.
    - Famous for liqueur muscats, tokays and some red production
  - **King valley**
    - South of Rutherglen; mountainous terrain w high altitude
    - Cool climate sites w various experimental grape varieties e.g. Sangiovese, Graciano, Mondeuse
    - Lower warmer altitude sites w Chardonnay & Shiraz
- **Port Philip zone**
  - Zone encircles Melbourne and Port Philip bay; south of the zone on the coast.
    - **Yarra valley**
      - 30km north-east of Melbourne; first vineyards in 1830s
      - Climate cooler than Bordeaux but warmer than Burgundy; cool & wet; drier in the north
      - Most vineyards 50-470m w soils varying from sandy or clay loam to red volcanic soils
      - Primary known for Chardonnay and Pinot Noir; Cabernet Sauvignon in warmer sites.
      - Sparkling wine industry recently invested in the area e.g. Domaine Chandon Australia.
      - Chardonnays are elegant w crisp acidity, citrus flavours
      - Pinot Noir full bodied & fruity (but not jammy) w cherry and earthy flavours.
    - **Mornington Peninsula – 920ha**
      - South of Melbourne; facing Geelong; first plantings in 1886
      - Cool maritime climate w 350mm rainfall during growing season; various soil structures; 25-250m high
      - Pinot Noir, Chardonnay but also Viognier and Pinot Gris made from boutique wineries e.g. Kooyong
    - **Geelong**
      - South-west of Melbourne; facing Mornington Peninsula; barren w windy climate
      - Shiraz from warm inland Anakie are and Pinot Noir & Chardonnay from Bellarine Peninsula. Riesling & Viognier grown here too. Home to Bannockburn gamey & complex Pinot Noirs.

#### **4. Tasmania - 1,250ha**

- Cool climate state enjoying positive effects from global warming.
- Majority of vineyards are located around Launceston in the north and Hobart in the south.
- Winemakers are fighting to get an exception on the ban on chaptalisation
- Chardonnay, Pinot Noir, Riesling and Sauvignon blanc represent nearly 90% of production
- Wines usually have high acidity, good balance of flavours and ageing potential. Alsace varieties too.
- Key producers: Pipers Brook (founded in 74 by Andrew Pirie, 1.2m btl/yr) or Josef Chromy

#### **5. New South Wales – 44,000ha – 30% of production**

- 2<sup>nd</sup> largest wine state & first winemaking region in Australia w vines planted in 1788
  - **Big Rivers zone**
    - Water for irrigation from Murrumbidgee & Murray rivers.
    - Mainly inexpensive varietal table wine.
      - **Murray Darling region**
      - **Riverina region - 23,000ha**
        - Hot & dry region; direct continuation eastwards of Murray Darling region
        - Mainly table wines made from Shiraz/Chardonnay but also some quality Botrytised Sémillon
        - Key producers include Casella wines, De Bortoli, Riverina estate and Mc Williams wines (country's #8 biggest producer) are trying to move quality up to reach more premium price brackets
  - **Hunter valley region – 4,200ha**
    - Region north of Sydney and inland from coastal town of Newcastle; either side of the Hunter river
    - First major plantings in 1825 by James Busby; Hunter Valley wines got international acclaim w several awards in the 1855 Paris Exhibition. At the start of the 1960s Sémillon and the 1990s Chardonnay boom.
    - One of the hottest but also highest humidity region w for afternoon cloud covers and substantial rainfall during the growing season and at harvest (-> grey rot)
      - **Lower Hunter Valley**
        - Along the Hunter river, around Pokolbin; Soils predominantly volcanic basalt.
        - Soft, earthy Shiraz & Sémillon w low alcohol, hi acidity and flavours of honey and toast
        - Key producers include Tyrell's and Brokenwood wines
      - **Upper Hunter Valley**
        - Drier irrigated region further inland. Produces butter-rich Chardonnay & soft Sémillon + Cab Sauv.

- **Central Ranges zone**
  - On the slopes of the Western ranges inland 100km from Sydney; north to south the 3 regions are:
    - **Mudgee region**
      - Aboriginal term for 'nest in hill'; continuous winemaking since 1858
      - Peach-Melon Chardonnays & full bodied chocolately Cabernet Sauvignon along with Shiraz
    - **Orange region**
      - In the foothills of Mount Canobolas; high and cool vineyards
      - Elegant Chardonnays & Cabernet Sauvignon
    - **Cowra region**
      - Warm and dry region west of Sydney that produces rich peach-flavoured Chardonnays
- **Southern New South Wales zone**
  - **Hilltops region**
    - New plantings at very high altitude of various reds, Chardonnay & Sémillon.
  - **Canberra district**
    - Around 200km south-west inland from Sydney; around Canberra town. High altitude vineyards.
    - Up and coming region following Hardy's investment in a 2,000ton winery in the area in 1997
    - Delicate, floral Rieslings and elegant peppery Shiraz as well as opulent Pinot noir.

PRODUCTION	<ul style="list-style-type: none"> <li>• <b>15m hl of wine produced</b></li> <li>• <u>Exports represent 60% of the production with</u> <ul style="list-style-type: none"> <li>- Australia main import in the UK with 20% of imports</li> <li>- More than half of Australiant exports &lt;\$2.50 and 90% &lt;\$5</li> </ul> </li> <li>• Local market is the main destination market with 40% consumed domestically</li> <li>• Winemakers allowed to sell to whoever and wherever they want.</li> <li>• 40% domestic tax on wine</li> <li>• <b>10 biggest wineries produce 80% of the wine</b></li> <li>• <u>Key producers:</u> <ul style="list-style-type: none"> <li>○ <b>Treasury Wine estates (Lindemans, Penfolds)</b> <ul style="list-style-type: none"> <li>- Part of Foster's group until 2011 when the brewing and wine division of the company were split.</li> <li>- Owns &amp; manages 12,000ha w sales of 35m cases worldwide</li> <li>- Key brands include:               <ol style="list-style-type: none"> <li>i. <b>Wolf Blass</b>: created in 66 by German immigrant Wolfgang Blass</li> <li>ii. <b>Penfolds</b>: founded in 1884 by English physician Christopher Penfold; vineyards in Adelaide (where founded), the Barossa &amp; Eden valleys, Mc Laren Vale and Coonwarra. Heartland remains in Barossa where wines e.g. the Grange range are full bodied, w ripe, rich sweet fruit and hi rounded tannins</li> <li>iii. <b>Lindeman's</b>: foun founded in 1843 by Henry Lindeman who planted vines in the Hunter valley. Famous Bin65 Chardonnay was praised by Parker in the Wine Advocate.</li> </ol> </li> </ul> </li> <li>○ <b>Accolade wines ex Constellation Wines Australia (Hardy's Banrock Station)</b> <ul style="list-style-type: none"> <li>- Constellation divested 80% of the company to Champ in 2011.</li> <li>- #1 in volume in the UK and Australia via key brands Banrock, Hardy's.</li> </ul> </li> <li>○ <b>Orlando wines / Pernod Ricard Australia (Jacob's Creek)</b> <ul style="list-style-type: none"> <li>- Founded in 1847 by Johann Gramp when he set up vines in the Jacob's creek.</li> <li>- Jacob's creek is now exported to over 60 countries</li> </ul> </li> <li>○ <b>Casella wines (Yellow Tail, Black Stump)</b> <ul style="list-style-type: none"> <li>- Owned by the Casella family; one of the largest wine companies in both sales &amp; wine in Australia</li> <li>- Processed 124,000 tons of fruit in 2008</li> <li>- Yellow Tail was created in 2000 and was the #1 imported wine in the US by 2003</li> <li>- Most grapes sourced from Riverina</li> </ul> </li> <li>○ <b>McGuigan Simeon</b> <ul style="list-style-type: none"> <li>- Plc led by Brian Mc Guigan; ambitious &amp; dynamic company</li> </ul> </li> </ul> </li> </ul>	
SWOT	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>(+) Market-led industry with adaptable vineyards (top-grafted vines) and wineries</li> <li>(+) Competitive and recognisable quality brands all across the world (i.e. critical mass)</li> <li>(+) Variety labelled wines and demystified marketing</li> <li>(+) Flexible GI system / South eastern super zone -&gt; simpler for producers</li> <li>(+) Great quality potential from a lot of different</li> <li>(+) Access to international expertise (flying winemakers)</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>(-) Lack of understanding of terroir; irrelevant grape varieties</li> <li>(-) Confusing GI system for consumers w no guarantee on production methods etc.</li> <li>(-) Relative low quality image</li> <li>(-) Small &amp; static dynamic market -&gt; reliance on exports of cheap bulk wines with limited margin</li> </ul>
	<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>[O] Untapped potential from new regions such as Canberra District</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>[T] Climate change (instability, severe frosts, droughts &amp; bush fires)</li> <li>[T] EU new wine laws on table wines</li> <li>[T] Global demand ↘</li> </ul>

# NEW ZEALAND

HISTORY	<ul style="list-style-type: none"> <li>• 1819: first vines planted by English missionary Reverend Marsden on North Island.</li> <li>• Late 1830s: first recorded wine made by James Busby in Waitangi</li> <li>• 19-20<sup>th</sup>: small-scale production w British settlers preferring beer and/or Aussie wines.</li> <li>• 1885: Phylloxera hit, probably brought from California</li> <li>• 1895-1909: strong influence of Bragato wine researcher who deemed some region v suitable for viticulture</li> <li>• 1955: shops allowed to sell to customers directly (before only 9l min per customer from hotels and wineries)</li> <li>• Since 1958: imports on beer and wine are taxed -&gt; has helped further devt of local wine industry</li> <li>• <b>1960s: replacement of old American vine varieties with vinifera; influx of international investors e.g. Penfold's, McWilliam's &amp; Seagram</b></li> <li>• <b>1973: first vines planted in Marlborough</b></li> <li>• 1990: supermarkets allowed to sell wine</li> </ul>
CLIMATE & WEATHER	<ul style="list-style-type: none"> <li>• <b>Cool maritime climate</b> excl. Central Otago where there is a dry continental climate</li> <li>• Generally cool but <b>North warmer vs. South</b> with north of North Island (Auckland) sub-tropical (23C avg temp in Jan)</li> <li>• Latitude comparison w Morocco and Bordeaux made irrelevant by maritime isolation.</li> <li>• <b>Rain</b> can be a problem but most vineyards planted on the eastern side so protected from westerly winds &amp; rain by central mountain range</li> <li>• <b>Frost</b> can also be a problem too (e.g. Marlborough in 2007), esp. in Spring &amp; Autumn.</li> </ul>
SOILS & TOPOGRAPHY	<ul style="list-style-type: none"> <li>• Dramatic variations (altitude up to 3,750m) but <b>vineyards usually grown on flat or gently sloping land</b></li> <li>• <b>Variied soils; often fertile.</b></li> <li>• <b>South Island</b> -&gt; free draining stony loam w similar pudding stones to CNDP</li> <li>• <b>Lesser importance of terroir</b> (so far) vs. other countries e.g. France</li> </ul>
GRAPE VARIETIES	<ul style="list-style-type: none"> <li>• Cool climate well suited for white varieties and Pinot Noir.</li> </ul> <p><u>Reds</u> (~25% of all plantings)</p> <p><b>9. Pinot Noir (15% of all plantings)</b></p> <ul style="list-style-type: none"> <li>- Mainly grown in South of North Island and South Island</li> <li>- NZ Pinot Noirs tend to have more fruit concentration, higher alcohol and tannins but similar quality vs. Burgundy</li> </ul> <p><b>10. Merlot (4%)</b></p> <ul style="list-style-type: none"> <li>- Progeny of Cabernet Franc grape; early flowering (-&gt; coulure risk), prone to rot</li> <li>- Responds better to damp, cool soils. Dry summers in well drained soils can lead to under-ripeness</li> <li>- Higher yielding in moderate climates</li> <li>- Mainly in North Island i.e. Auckland &amp; Hawke's bay</li> </ul> <p><b>11. Cabernet Sauvignon (1%)</b></p> <ul style="list-style-type: none"> <li>- Mainly in North Island i.e. Auckland/Hawke's bay</li> <li>- Progeny of Cab Franc &amp; Sauv Blc</li> <li>- Small-sized berries w concentrated phenolics;</li> <li>- Ageing potential and affinity for oak</li> </ul> <p><b>Others: Syrah (1%), Cab Franc, Malbec</b></p> <p><u>Whites</u> (75% of all plantings)</p> <p><b>1. Sauvignon blanc (58% of all plantings)</b></p> <ul style="list-style-type: none"> <li>- Vigorous vine (-&gt; use of low vigour rootstock + canopy management)</li> <li>- Capsicum (bell pepper), cut grass and elderflower</li> <li>- Predominantly in Marlborough (South). North Island SB less herbaceous and more exotic fruit</li> <li>- Barrel ageing to give nutty character &amp; complexity (Hunter's) or lees stirring / wild yeasts.</li> </ul> <p><b>2. Chardonnay (9%)</b></p> <ul style="list-style-type: none"> <li>- Hardy, easy to grow &amp; versatile</li> <li>- Can produce interesting wines even at hi yields</li> <li>- Different styles (oak-fermented/not, MLF, lees stirring) but unoaked becoming more common</li> </ul> <p><b>3. Pinot Gris (7%)</b></p> <ul style="list-style-type: none"> <li>- Increasingly popular along w Riesling, Gewurztraminer &amp; Viognier esp. in South Island.</li> </ul> <p><b>4. Riesling (2%)</b></p> <ul style="list-style-type: none"> <li>- Expressive grape; hi quality potential; hardy &amp; versatile; ageing potential</li> <li>- Mainly found on South Island</li> </ul> <p><b>Others: Gewurztraminer (1%), Sémillon, Muscat, Muller-Thurgau</b> (formerly main grape of NZ)</p>
VITICULTURE	<ul style="list-style-type: none"> <li>• 34,200ha in 2012 (max foreseen 35,000ha). Similar size to Champagne.</li> <li>• Fertile soils -&gt; inter-row crops, drainage channels and rootstock to minimise vigour.</li> <li>• <b>World leader in canopy management and trellising techniques</b> following the work from Dr Smart in the 80s.</li> <li>• Key risks: spring/autumn frost, phylloxera (-&gt; 94% of vines grafted) and birds (-&gt; netting, noise &amp; shooters)</li> <li>• <b>NZ Sustainable Winegrowing</b> with members committed to reduce the use of chemicals, energy, water &amp; packaging and recycle. Example: heat recovery in Auckland. Most vineyards are taking part.</li> </ul>
WINEMAKING	<ul style="list-style-type: none"> <li>• <b>Use of stainless steel, temperature control and high standards</b> of hygiene transferred from the dairy industry</li> <li>• Acidification, deacidification and enrichment all allowed but avg quality remains high</li> <li>• Around 2/3 of NZ wines use the screw cap closure.</li> </ul>
WINE LAWS	<ul style="list-style-type: none"> <li>• 2006: GI Registration Act based on the Australian GI program.</li> <li>• 2007: Labelling laws state that wines must have 85% of variety, vintage and area stated on the label</li> </ul>
KEY REGIONS & CHARACTERISTICS	<p><b>7. North Island – 8,000ha</b></p> <ul style="list-style-type: none"> <li>o Warmer climate w vineyards on the eastern coast to benefit from rain protection; smaller area</li> <li>▫ <b>Auckland – 320ha</b> <ul style="list-style-type: none"> <li>- North &amp; West of Auckland city where most of the major wineries have their headquarters/winery</li> <li>- Heavy clay soils; Warmest region w sub-tropical climate</li> <li>- Mainly Chardonnay, Merlot and Cabernet Sauvignon (esp. Waiheke island) for riper styles of wine</li> </ul> </li> <li>▫ <b>Gisborne – 1,600ha</b> <ul style="list-style-type: none"> <li>- East coast of the North Island; warm &amp; sunny w mainly fertile soils</li> <li>- Chardonnay &amp; Gewurztraminer are the main plantings -&gt; aromatic round whites</li> </ul> </li> </ul>

- **Hawke's Bay – 4,800ha**
  - South of Gisborne, along the eastern coast, 2<sup>nd</sup> largest area of NZ; historical region (Te Mata 1<sup>st</sup> NZ winery)
  - Warmer climate with 'Gimlett gravels' around Hastings where most wineries are
  - Cabernet & Merlot produce high quality Bordeaux blends. Promising Syrah too.
- **Wairarapa / Wellington – 950ha**
  - Southern tip of the North Island w cooler climate & free draining low fertility soils esp. in Martinborough
  - Pinot territory with PN nearly half of the plantings for rich, full bodied cherry-flavoured wines
  - Predominance of small boutique producers esp. around Martinborough

## 8. South Island – 27,500ha

- Started much later than in the North but expanded very fast despite being more marginal.
  - **Marlborough – 22,500ha - 66% of plantings**
    - East-northern tip of the South Island around Blenheim & facing Martinborough
    - Sunniest area of New Zealand
    - Best vineyards planted on the stony free draining soils in the Wairau, Waihopai & Awatere valleys
    - 75% of volumes; 80% of all Sauvignon blanc plantings
    - Also produces Pinot Noir, Chardonnay both for still & sparkling along with Riesling & Gewurztraminer
  - **Nelson – 960ha**
    - South's Island most northerly wine region; north-east of Marlborough; central bay of northern tip
    - Warm & sunny but can suffer from autumn rains (-> ripening more of a challenge) w 2 different sub-areas:
      1. Waimea plains (stony silt & flat along river) 2. Upper Moutere Hills (clay loam hills)
    - Mainly Sauvignon blanc but also Chardonnay, Riesling, Gewurztraminer & Pinot Noir
  - **Canterbury – 2,200ha**
    - Central east coast of the south island
    - Cool & dry climate w moderate risk of October and April frosts; low rainfall and light soils of moderate fertility
    - Chardonnay and Pinot Noir are the main varieties
    - 3 sub areas:
      - i. **Waipara** (1,000ha): east coast, north of Canterbury; rising start since 2000
      - ii. Canterbury plain: southwest of Canterbury i.e. more inland
      - iii. Banks peninsula: coastal point east of Canterbury
  - **Central Otago – 1,800ha**
    - World's most southerly vineyards w some south of 45<sup>th</sup> parallel; 300m avg altitude for vineyards
    - Mountainous inland region w continental climate hot & dry summers, short sunny autumns and cold winters w heavy snowfall. Continental climate due to the protection of the southern alps
    - Vineyards planted on hillsides to maximise sun exposure and reduce frost risk.
    - Key sub-region is Bannockburn, a small warm dry area near Queenstown & Cromwell with output limited by geography and a number of high quality producers (e.g. Felton Road)
    - Pinot Noir represent ¾ of the region's wines w the rest being Chardonnay, Sauvignon blanc, Riesling, Pinot Gris & Gewurztraminer
    - One of the last established wine region but catching up fast

## PRODUCTION, TRADE ORGANISATION & BUSINESS

- Average: 200m hl produced by 700 wineries w only 30% for the local market
- Exports:
  - **85% of exports to UK** (35% w 53m litres), AUS (30% w 45m l) & US (20% w 32m)
  - 92% of exports are white wines
- Many wine producers started as contract fruit growers and it is common to have fruits grown in one place (Marlborough) and vinified elsewhere (Auckland).
- 6 large producers are responsible for 80-85% of the production
- 3 key producers dominate the industry:
  - **Montana (Pernod Ricard)**
    - Founded in 1934 by a Croatian immigrant w 10ha. Now part of Pernod Ricard since 05 w 3,000ha
    - 5 wineries including Brancott Winery (Marlborough) for high volume Sauvignon Blanc & Church Road winery (Hawkes Bay) for small boutique wines under Church Road brand.
    - Range: Church Road, Montana (incl. Brancott estate), Deutz (sparkling in collaboration w Champagne Deutz) and Lindauer (NZ's most exported sparkling wine)
  - **Nobilo (Constellation brands)**
    - Founded by Nikola Nobilo in 1943 & acquired by Constellation brands in 2003
    - Initial success built on Muller-Thurgau wines (i.e. White Cloud a Muller-Thurgau-Chenin Blanc in 80s)
    - Key brand: Nobilo
  - **Villa Maria Estates**
    - Founded by George Fistonich in 1961
    - 2 wineries both in Auckland
    - Key brands: Villa Maria, Esk Valley & Thornbury
- Key brands in the UK:
  - **Cloudy Bay**
    - 140ha vineyard in Marlborough on deep alluvial gravels; first vintage in 1985 (from purchased grapes) and hailed as the New World answer to the restrained Sancerre wines
    - Bought over by LVMH in 2003 and criticised since for becoming diluted and anonymous
  - **Felton Road**
    - Vineyards in Central Otago first planted in 1991 with strong UK following
    - Organic winemaking w strong individual clean fruit flavours
- Vintages:
  - 2011-2: more average-good vintages
  - 2010: excellent vintage for reds & whites