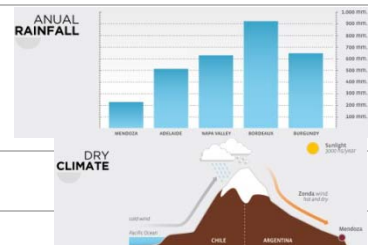


# SOUTH AMERICA #1 – ARGENTINA

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| <p>HISTORY</p>                                   | <ul style="list-style-type: none"> <li>• 1541-1550: various unsuccessful attempts at importing vinifera vines by various missions</li> <li>• 1557: first recorded vineyard planted at Santiago del Estero at the foothills of the Andes by Jesuit missionaries.</li> <li>• 1561: Mendoza city founded</li> <li>• 1569-89: development of vineyards in the province of San Juan (north of Mendoza)</li> <li>• 17-19<sup>th</sup>: Use of dams &amp; irrigation to create wines in growing quantity and more resistant to long transportation</li> <li>• <b>1852: French Pouget brings Malbec from France to Argentina.</b></li> <li>• <b>19<sup>th</sup>: waves of European immigrants incl. Italy, Spain, France w new vine varieties + development of transport network (Mendoza-Buenos Aires) -&gt; foundations of modern Argentinean wine industry</b></li> <li>• 1930s: global recession</li> <li>• 1943-1955: General Perón -&gt; relative prosperity</li> <li>• Mid50s-80s: political unrest. Low quality table wines produced to cater for hi consumption (90l/pers/yr).</li> <li>• 1980-90s: political &amp; economic stability (with successive military governments -&gt; country more &amp; more isolated -&gt; lack of wine investment</li> <li>• 60-70s: predominance of vino de mesa Prsdtd Menem) -&gt; modernisation + massive vine pull scheme + focus on export &amp; vine pull scheme to focus more on quality wines.</li> </ul>  |
| <p>KEY REGIONS (3) &amp; KEY CHARACTERISTICS</p> | <ul style="list-style-type: none"> <li>• 5 regions all along the Andes (from North to South):</li> <li>1. <b>Salta province</b> (1,900ha) – mainly around Cafayate in Calchaquies valley             <ul style="list-style-type: none"> <li>▪ Climate &amp; soil: similar to Mendoza i.e. alluvial soil with clay substructure</li> <li>▪ Topo: Hi altitude (2,000-2,400m) w large diurnal changes</li> <li>▪ G. Varieties: Torrontes Riojano; Tannat; Cabernet Sauvignon</li> <li>▪ Styles: aromatic, full bodied dryish whites</li> </ul> </li> <li>2. <b>La Rioja</b> (Famatina in the EU)             <ul style="list-style-type: none"> <li>▪ Oldest wine region; home to Torrontes Riojano and Moscatel de Alexandria; lack of water for irrigation makes wine making marginal. Production dominated by 1 group of co-operative cellars.</li> </ul> </li> <li>3. <b>San Juan</b> <ul style="list-style-type: none"> <li>▪ 2<sup>nd</sup> largest after Mendoza (47,000ha – 20% of all wine production), north of Mendoza.</li> <li>▪ Climate: hotter vs. Mendoza</li> <li>▪ Traditional home to Cereza. Since late 1990s, more Bonarda &amp; Syrah; now in decline.</li> <li>▪ Best known for cheap wine from undefined grapes but wineries like Penaflo &amp; Santiago Graffigna produce good robust reds.</li> <li>▪ Large producer of sherry style wines, Vermouth as well as light wines</li> </ul> </li> <li>4. <b>Mendoza</b> <ul style="list-style-type: none"> <li>▪ 70% of country's wine production w 140,000ha</li> <li>▪ Topography: 600-1,100m near Mt Aconcagua / Loose, sandy, alluvial soil w clay substructures + trees to protect from summer temp Water in plenty from Andes' glaciers</li> <li>▪ Climate: Continental w 4 seasons + no extreme temp variations Rainfall of 200-300mm/yr in summer. La Piedra (early summer hail) + La Zonda (hot dry wind from N-E) = key risks</li> <li>▪ Areas:                 <ol style="list-style-type: none"> <li>North Mendoza:                     <ul style="list-style-type: none"> <li>▪ 600-700m; Lavelle+ Las Heras + Guaymallén + San Martín + part of Maípu</li> </ul> </li> <li>Upper Mendoza river region:                     <ul style="list-style-type: none"> <li>▪ 700-1,100m; Lujan de Cuyo + Perdriel + Agrelo + Ugartheche + most of Maípu.</li> <li>▪ <b>Luján de Cuyo</b>: 1<sup>st</sup> Argentinean DOC (92) situated; 800-1,000m, low rainfall + 15C mean annual temp. Best old vine Malbec vineyards in here along with Perdriel</li> <li>▪ Catena, Trapiche and Norton's home.</li> </ul> </li> <li>Uco Valley region (Tupungato)                     <ul style="list-style-type: none"> <li>▪ 900-1,250m; cooler climate w hi diurnal change -&gt; great for aromatic whites &amp; Pinot Noirs.</li> </ul> </li> <li>East Mendoza                     <ul style="list-style-type: none"> <li>▪ Big volume producing area; Junin + Rivadavia + San Martín + Santa Rosa. Best wines from La Agricola in SR</li> </ul> </li> <li>San Rafael (Valentín Bianchi's home)</li> </ol> </li> </ul> </li> <li>5. <b>Neuquen &amp; Río Negro ('black river')</b> <ul style="list-style-type: none"> <li>▪ 3,800ha but not at full potential.</li> <li>▪ Dry heat, lack of rainfall. Cooler climate w long warm ripening season + chalky soil -&gt; ideal for whites</li> <li>▪ Soils: Alluvial sands &amp; gravel. Irrigation system pioneered by the British in 20th.</li> <li>▪ Gr. Varieties: Torrontés Riojano, Sémillon, Chardonnay &amp; Pinot Noir, Malbec.</li> <li>▪ Humberto Canale 1st to plant Bdx vines for commercial purposes. A lot have followed since (e.g. Fabre Montmayou)</li> </ul> </li> </ul> |
| <p>CLIMATE &amp; WEATHER</p>                     | <ul style="list-style-type: none"> <li>• Viticulture possible due to cooling effect of altitude.</li> <li>• Semi-desert w rainfall &lt;250mm/yr, mainly in the summer (hail risk)</li> <li>• High diurnal temperature range: from 10C at night to 40C in the day.</li> <li>• Dry unpolluted air but hot, dry hurricane-force Zonda in early summer</li> </ul>  |
| <p>SOILS &amp; TOPOGRAPHY</p>                    | <ul style="list-style-type: none"> <li>• High proportion of sand</li> <li>• Maipú + Río Negro: more gravelly soils</li> </ul>  |



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| GRAPE VARIETIES   | <ul style="list-style-type: none"> <li>• Historic pink grape varieties (still 30% of all vines planted)             <ol style="list-style-type: none"> <li><b>Cereza</b> ('cherry' in Spanish):                 <ul style="list-style-type: none"> <li>- Large berries; juice paler vs. Criolla; brought in by Spanish settlers</li> <li>- Mainly in eastern Mendoza + San Juan =&gt; Rosé of mediocre quality for local consumption or grape concentrate</li> </ul> </li> <li><b>Criolla Grande</b>:                 <ul style="list-style-type: none"> <li>- Pink-skinned grapes; low quality vinifera variety; amongst 1st vines cultivated in the Americas</li> <li>- Most planted variety in Mendoza (&gt;Malbec)</li> <li>- Can make white or pink wine. Cheap and sold in litre bottles or cartons.</li> </ul> </li> <li><b>Criolla Chica</b> (// País in Chile)                 <ul style="list-style-type: none"> <li>- Imported by Spanish conquistadores in 16th. Less common vs. Cereza &amp; Grand. Paler &amp; slightly better quality</li> </ul> </li> </ol> </li> <li>• Modern grape varieties:             <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 50%;"> <p><u>Reds (47% of plantings)</u></p> <ol style="list-style-type: none"> <li><b>Malbec (34% of plantings)</b> <ul style="list-style-type: none"> <li>- Introduced to Mendoza in 19<sup>th</sup> century from Bordeaux, potentially via Chile</li> <li>- Smaller, tighter bunches vs. Bdx Malbec</li> <li>- Best grown at slightly higher altitude</li> <li>- Argentina's USP; can benefit from oak ageing</li> </ul> </li> <li><b>Bonarda (18%)</b> <ul style="list-style-type: none"> <li>- More Bonarda in Argentina vs. Italy</li> <li>- Actually linked to Savoie's Charbono or 'Corbeau</li> </ul> </li> <li><b>Cabernet Sauvignon (17%)</b> <ul style="list-style-type: none"> <li>- Plantings nearly x3 since '90</li> <li>- Often blended w Merlot or Syrah</li> </ul> </li> <li><b>Syrah (13%)</b></li> <li><b>Merlot (11%)</b></li> <li><b>Tempranillo (10%)</b> <ul style="list-style-type: none"> <li>- For light fruity reds via carbonic maceration</li> </ul> </li> <li><b>Sangiovese (6%)</b></li> <li><b>Barbera (2%)</b></li> </ol> </td> <td style="vertical-align: top; width: 50%;"> <p><u>Whites (20% of plantings)</u></p> <ol style="list-style-type: none"> <li><b>Pedro Giménez (28.2%)</b> <ul style="list-style-type: none"> <li>- Light skinned</li> <li>- Alcoholic full bodied wine for blending or grape concentrate (for export to Japan)</li> </ul> </li> <li><b>Torrontes (24.2%)</b> <ul style="list-style-type: none"> <li>- Argentine's only native grape</li> <li>- <b>Riojano</b> (best) <b>SanJuanino</b> (bigger berries, less aromatic) or <b>Mendocino</b> (Rio Negro, lacks Muscat aromatics)</li> <li>- First 2 believed to be a crossing between Muscat of Alexandria Criolla chica</li> <li>- Produces hi acidity, aromatic</li> <li>- Adapts well to hi sandy soils of Cafayate</li> </ul> </li> <li><b>Chardonnay (15%)</b> <ul style="list-style-type: none"> <li>- Specific Mendoza clone developed in the US</li> <li>- Successful in Tupungato (1,200m)</li> </ul> </li> <li>Sauvignon Blanc (5.3%) – tends to be flabby</li> <li>Viognier (1%) – increasing</li> </ol> </td> </tr> </table> </li> </ul> | <p><u>Reds (47% of plantings)</u></p> <ol style="list-style-type: none"> <li><b>Malbec (34% of plantings)</b> <ul style="list-style-type: none"> <li>- Introduced to Mendoza in 19<sup>th</sup> century from Bordeaux, potentially via Chile</li> <li>- Smaller, tighter bunches vs. Bdx Malbec</li> <li>- Best grown at slightly higher altitude</li> <li>- Argentina's USP; can benefit from oak ageing</li> </ul> </li> <li><b>Bonarda (18%)</b> <ul style="list-style-type: none"> <li>- More Bonarda in Argentina vs. Italy</li> <li>- Actually linked to Savoie's Charbono or 'Corbeau</li> </ul> </li> <li><b>Cabernet Sauvignon (17%)</b> <ul style="list-style-type: none"> <li>- Plantings nearly x3 since '90</li> <li>- Often blended w Merlot or Syrah</li> </ul> </li> <li><b>Syrah (13%)</b></li> <li><b>Merlot (11%)</b></li> <li><b>Tempranillo (10%)</b> <ul style="list-style-type: none"> <li>- For light fruity reds via carbonic maceration</li> </ul> </li> <li><b>Sangiovese (6%)</b></li> <li><b>Barbera (2%)</b></li> </ol> | <p><u>Whites (20% of plantings)</u></p> <ol style="list-style-type: none"> <li><b>Pedro Giménez (28.2%)</b> <ul style="list-style-type: none"> <li>- Light skinned</li> <li>- Alcoholic full bodied wine for blending or grape concentrate (for export to Japan)</li> </ul> </li> <li><b>Torrontes (24.2%)</b> <ul style="list-style-type: none"> <li>- Argentine's only native grape</li> <li>- <b>Riojano</b> (best) <b>SanJuanino</b> (bigger berries, less aromatic) or <b>Mendocino</b> (Rio Negro, lacks Muscat aromatics)</li> <li>- First 2 believed to be a crossing between Muscat of Alexandria Criolla chica</li> <li>- Produces hi acidity, aromatic</li> <li>- Adapts well to hi sandy soils of Cafayate</li> </ul> </li> <li><b>Chardonnay (15%)</b> <ul style="list-style-type: none"> <li>- Specific Mendoza clone developed in the US</li> <li>- Successful in Tupungato (1,200m)</li> </ul> </li> <li>Sauvignon Blanc (5.3%) – tends to be flabby</li> <li>Viognier (1%) – increasing</li> </ol> |
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| VITICULTURE & WINEMAKING  | <ul style="list-style-type: none"> <li>• High pergolas to raise grapes away from heat. Newer plantings on cordon training systems.</li> <li>• Irrigation with mountain water drawn via complex man-made systems.</li> <li>• Still 90% of vineyards flood irrigated (-&gt; hi yields) but also furrow irrigations or drip irrigation since late 90s.</li> <li>• Use of netting vs. hail.</li> <li>• Dry sunny conditions =&gt; Remarkably low incidence of vine disease + high yields of healthy ripe grapes</li> <li>• Harvesting mainly manual due to low cost.</li> <li>• Wine-making techniques based on historic grapes for hi volumes but modernisation since 90s.</li> <li>• Hygienic, temperature controlled fermentation in stainless steel most common.</li> <li>• Ageing in large oak casks for reds although some use 225l barriques.</li> </ul>   |   |   |
| WINE STYLES   | <ul style="list-style-type: none"> <li>• Malbecs: deep coloured, robust &amp; fruity red; best &amp; most balanced red wine from Argentina</li> </ul>   |   |   |
| PRODUCTION  | <ul style="list-style-type: none"> <li>• 5<sup>th</sup> biggest producer in the world with 15.5m hl/2.2bn btls/year (in '10). Just under 5% of world production.</li> </ul>   |   |   |
| TRADE   | <ul style="list-style-type: none"> <li>• Consumption: 30l/pers/yr – a 1/3 of 1970s consumption level</li> <li>• Predominance of relatively large specialist grape-growing concerns.</li> <li>• Widespread use of foreign consultants &amp; flying winemakers to help exports.</li> <li>• Key producers (brands):             <ul style="list-style-type: none"> <li>- <b>Grupo Penaflo</b>: largest wine exporter by far</li> <li>- <b>Norton</b>: founded 1895 by English engineer; now Swarovski since '89. 680ha for good value quality wines.</li> <li>- <b>DLJ</b> (Trapiche): 27m btls/year. Standard to ultra premium range (Medalla)</li> <li>- <b>Nicolás Catena</b> (Catena Alta, Alamos, Gascon): 425ha + buying as much; architect of modern wine industry; joint venture w Ch. Lafite Rothschild.</li> <li>- <b>Moet &amp; Chandon</b> (Terrazas): high altitude vineyards in best Mendoza locations. Joint venture w Cheval Blanc (Cheval de los Andes). 3.6m btls/year</li> <li>- <b>Familia Zuccardi</b>: one of the largest family-owned w 600ha; modern and innovative approach w new grape var</li> </ul> </li> <li>• Other more recent investors:             <ul style="list-style-type: none"> <li>- Hervé's Joyaux from Bordeaux (<b>Fabre Montmayou</b>) since 93. Fine Malbec from old vineyards + Bdx blends</li> <li>- Sogrape from Portugal (<b>Finca Flichman</b>)</li> <li>- Pernod Ricard (Etchart)</li> <li>- Allied Domecq (Balbi)</li> </ul> </li> </ul>  |   |   |
| WINE CLASSIFICATION   | <ul style="list-style-type: none"> <li>• Instituto Nacional de Vitivinicultura (INV) is the Government's controlling body.</li> </ul>   |   |   |
| SWOT DISCUSSION TOPICS  | <p>S: dynamic / growing / turned to exports / strong, sustainable USP w Malbec &amp; Torrontes + international varieties<br/>       W: modernising<br/>       O: international investment a plenty / untapped potential in some regions e.g.<br/>       T: cost of living increasing</p>  |   |   |

# SOUTH AMERICA #2 – CHILE

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| HISTORY                               | <ul style="list-style-type: none"> <li>• Mid 16th: vinifera vines by Spanish settlers partly to celebrate Eucharist.</li> <li>• 1554: vine believed to arrive via Juan Jufre and Garcia de Cáceres in the Central Valley.</li> <li>• 17<sup>th</sup>: Spain tried to ban new plantings in Chile to protect exports but governor refused &amp; encouraged hacienda devt.</li> <li>• 18<sup>th</sup>: reputation for quantity and low cost of wine</li> <li>• <b>1830: French Claudio Gay persuaded the government to set up the Quinta Normal experimental nursery which resulted in Chile having their own vinifera cuttings and eventually protection against Phylloxera.</b></li> <li>• 1851: Chilean Echazarreta travelled the world &amp; imported Bordeaux vines. French Phylloxera refugees helped set up rich farmers' wine-making estates.</li> <li>• <b>1870-1950s: the Chilean wine industry grows v healthily</b> (vs. Phylloxera everywhere else) and v profitably in the hands of a few private companies. Hi local demand eventually meant taxes started creeping up.</li> <li>• 1970-early 80s: local demand declined and prices plummeted -&gt; 50% of Chile's vineyards pulled</li> <li>• <b>1980-90s: return of democracy and plantings of international varieties + significant investments to focus more on exports</b></li> </ul>   |
| KEY REGIONS (4) & KEY CHARACTERISTICS | <ol style="list-style-type: none"> <li><b>1. Coquimbo</b> <ul style="list-style-type: none"> <li>- Newest wine region; dry weather + cooling ocean influence delays ripening + clear skies = great conditions</li> <li>- Historically grape growing for Pisco &amp; table wine production but recent devt of quality wines in:           <ol style="list-style-type: none"> <li><b>a. Elqui valley:</b> highest wine region (up to 2,000m); desert-like climate, altitude + cool growing conditions -&gt; Cab Sauv + Syrah &amp; Sauvignon blanc</li> <li><b>b. Limari valley:</b> east/west valley w morning fogs from Pacific; lo rainfall necessitates drip irrigation (desert-like climate). Cab Sauv, Carmenere &amp; Chardonnay. Fresh wines w mineral edge.</li> </ol> </li> </ul> </li> <li><b>2. Aconcagua</b> (named after river which bisects it)       <ol style="list-style-type: none"> <li><b>a. Aconcagua</b> (north): Mediterranean climate; hottest &amp; driest w alluvial soils -&gt; good red wines. Cab Sauv, Syrah, Carmenere + coastal SB.</li> <li><b>b. Casablanca:</b> cool Mediterranean, first vines in '82 by Concha y toro; Winkler Region I thanks to cool morning fogs brought by Humboldt and fewer clear days (//Carneros in California) -&gt; slower ripening + more complex flavours. Mainly Sauvignon blanc, Chardonnay &amp; Pinot noir. Risk of spring frosts.</li> <li><b>c. San Antonio:</b> new subregion w pronounced Pacific influence -&gt; fresh Sauvignon Blanc &amp; top Pinot Noirs (Leyda).</li> </ol> </li> <li><b>3. Central Valley (90% of exported wines)</b> <ol style="list-style-type: none"> <li><b>a. Maipo:</b> most famous but not largest (10,500ha); hottest subregion just south of Santiago; Mediterranean climate; sandy soils w gravel top Cabernet Sauvignon &amp; Chardonnay. Most bodegas' headquarters based there.</li> <li><b>b. Rapel</b> (31,000ha): divided into Cachapoal &amp; Colchagua subregions; Mainly alluvial &amp; clay soil + 600-1,000m hi; mainly Cabernet Sauvignon, Merlot &amp; Camenere; home Luis Felipe Edwards &amp; Ch. Lafite's Los Vascos.</li> <li><b>c. Curicó</b> (19,000ha): cooler wetter conditions due to cloud cover &amp; latitude; known for quality Chardonnay but also good value Pinot Noir, Cabernet Franc/Sauvignon &amp; Merlot; home to Vina Montes &amp; Torres</li> <li><b>d. Maule</b> (29,300ha): wettest of four subregions; Mediterranean climate, volcanic soils &amp; rolling hills; mainly País but also Cabernet Sauvignon &amp; Chardonnay.</li> </ol> </li> <li><b>4. Southern regions (14,000ha)</b> <ul style="list-style-type: none"> <li>- New areas; mainly on hills or nearer the sea.</li> <li><ol style="list-style-type: none"> <li><b>a. Itata:</b> Mediterranean climate w hi rainfall. Cabernet Sauvignon, Merlot &amp; Chardonnay</li> <li><b>b. Bio-Bio:</b> moderate Mediterranean climate w highest rainfall in CL, strong winds -&gt; less sunshine, longer growing seasons -&gt; devt of Riesling and Gewürztraminer.</li> <li><b>c. Malleco:</b> moderate Mediterranean climate w hi rainfall. Chardonnay &amp; Pinot Noir.</li> </ol> </li> </ul> </li> </ol> |
| GEOGRAPHY                             | <ul style="list-style-type: none"> <li>• Isolated by coastline on west, Andes on the east, Atacama desert on the north, Antarctic on the south.</li> <li>• Near perfect grape growing conditions.</li> <li>• Wine producing regions same latitude as southern Spain</li> </ul>   |
| CLIMATE & WEATHER                     | <ul style="list-style-type: none"> <li>• Mediterranean climate w warm, dry summer and rainy winters. Hi diurnal range</li> <li>• Hot climate mitigated by the influence of the Pacific (cold Humboldt current) &amp; cool downdrafts from the Andes.</li> <li>• Between Napa valley and Bordeaux</li> </ul>  |
| SOILS & TOPOGRAPHY                    | <ul style="list-style-type: none"> <li>• 3,000miles of Coastline + Andes at 7,000m</li> <li>• Most Chile's vineyards planted on flat, fertile soil where water is available or irrigation easier.</li> <li>• Aconcagua &amp; south of Maipo: alluvial soils</li> <li>• Maipo &amp; Cachapoal: loam, clay &amp; sand</li> <li>• South Rapel &amp; Maule: some tuffeau soils</li> <li>• South Curico to Bio Bio: volcanic soils</li> </ul>   |

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|---------------------|---|
| GRAPE VARIETIES     | <ul style="list-style-type: none"> <li>• Until 90s, País most common grape and still #2 w 15,000ha. Assimilated to Criolla Chica (Arg) &amp; Mission (Calif.)</li> <li>• Excluding País, the main grape varieties are:</li> </ul> <p><u>Reds (73% of plantings)</u></p> <ol style="list-style-type: none"> <li>1. <b>Cabernet Sauvignon</b> (42%) <ul style="list-style-type: none"> <li>- Brought from France mid 19<sup>th</sup></li> <li>- Late ripening; varietal or blended</li> <li>- Aconcagua, Maipo &amp; Rapel</li> <li>- Eucalyptus notes in Alto Maipo</li> </ul> </li> <li>2. <b>Merlot</b> (10%) <ul style="list-style-type: none"> <li>- Varietal or blended</li> <li>- Spicy, green peppery aromas</li> <li>- Often field blended w Carmenere</li> </ul> </li> <li>3. <b>Carmenere</b> (9%) <ul style="list-style-type: none"> <li>- Widely cultivated in Bordeaux in 18<sup>th</sup></li> <li>- Discovered in Chile in '94</li> <li>- Late ripener, susceptible to coulure (-&gt; low yields)</li> <li>- Difficult to get ripe tannins &amp; non-herbaceous aromas</li> </ul> </li> <li>4. <b>Syrah</b> (6%) <ul style="list-style-type: none"> <li>- Hi quality in San Antonio w ripe, black fruits + subtle pepperiness</li> </ul> </li> <li>5. <b>Pinot Noir</b> (3%) <ul style="list-style-type: none"> <li>- Showing promise in San Antonio (Leyda) &amp; Casablanca</li> </ul> </li> </ol> <p><u>Whites (27% of plantings)</u></p> <ol style="list-style-type: none"> <li>1. <b>Chardonnay</b> (14%) <ul style="list-style-type: none"> <li>- Crisp citrus &amp; apple flavours</li> <li>- Use of oak for toast &amp; caramel characters</li> </ul> </li> <li>2. <b>Sauvignon Blanc</b> (13%) <ul style="list-style-type: none"> <li>- Ripe, tropical fruit in new plantings</li> <li>- Sometimes mixed up w Sauvignonasse or Sauvignon vert in the past.</li> </ul> </li> </ol> |
| VITICULTURE         | <ul style="list-style-type: none"> <li>• 110,000ha of vineyards</li> <li>• Irrigation is key in nearly 50% of all vineyards; either natural (melting Andes snow) or drip irrigation (since 90s) Irrigation less necessary in coastal areas of southern regions</li> <li>• Relatively hi yields (70hl/ha). Formerly gobelet system (inherited from Spanish practices) but more Guyot.</li> <li>• Harvest: end of February for early maturing grapes (Chardonnay) to late April (Cab Sauv) &amp; May (Carmenere).</li> <li>• Phylloxera-free but nematodes main risk as rootstocks have low resistance. Powdery mildew, botrytis bunch rot common.</li> </ul>   |
| WINEMAKING          | <ul style="list-style-type: none"> <li>• Dramatic revolution since 80s with large LT investments put in the industry to introduce pneumatic presses, oak barrels, stainless steel, modern filters &amp; temperature control.</li> </ul>   |
| WINE STYLES         | <ul style="list-style-type: none"> <li>• Reds: good value young wines from Cab Sauv, Carmenere &amp; Merlot</li> <li>• Whites: clean &amp; well made Chardonnay and Sauvignon Blancs esp. in cooler areas (Casablanca &amp; San Antonio)</li> </ul>   |
| PRODUCTION          | <ul style="list-style-type: none"> <li>• ~800million btls/year, 1/2 of Argentina. 9<sup>th</sup> biggest producer in the world with 3.8% of 2010 world wine production</li> </ul>   |
| TRADE               | <ul style="list-style-type: none"> <li>• Key wine exporting companies partly own vineyards &amp; partly buy grapes <ul style="list-style-type: none"> <li>○ <b>Concha y Toro</b> – 5m cases in the UK <ul style="list-style-type: none"> <li>- Largest south American wine producer (8,800ha/30m cases/872m); recently acquired Fetzer vineyards</li> <li>- Founded in 1883 Don Melchor de Santiago Concha y Toro; originally brought Bdx grapes; started exporting in '33</li> <li>- Produces most of Chilean key grapes; brands: Casillero del Diablo, Cono Sur</li> <li>- Notable wines: late harvest Sauvignon Blanc from Maule &amp; Don Melchor single vineyard Cabernet Sauvignon</li> </ul> </li> <li>○ <b>Santa Rita</b> <ul style="list-style-type: none"> <li>- 2,000ha; 2nd largest land owning winery; sustainable agriculture &amp; modern techniques for better quality wines</li> </ul> </li> <li>○ <b>Vina Montes:</b> <ul style="list-style-type: none"> <li>- Established in '72; 490ha in Colchagua valley; quality at all levels; top wines: AlphaM Cab Sauv &amp; Folly Syrah.</li> </ul> </li> <li>○ <b>Errazuriz:</b> established in 1870 by Don Maximiano Errazuriz in Aconcagua valley</li> </ul> </li> <li>• Devt of estate wineries (e.g. Los Vascos, Montes) that only use own grapes.</li> <li>• Foreign investors: Mondavi, Lafite-Rothschild (Almaviva w Concha y toro), Torres</li> </ul>  |
| WINE CLASSIFICATION | <ul style="list-style-type: none"> <li>• New wine classification introduced by decree 464</li> <li>• Key criteria: 85% of the grapes must come from the communities within the 3 defined areas</li> </ul> <ol style="list-style-type: none"> <li>1. <b>Costa:</b> <ol style="list-style-type: none"> <li>a. Limarí valley: Ovalle</li> <li>b. Casablanca Valley: Casablanca</li> <li>c. San Antonio Valley: Leyda valley (San Juan &amp; Marga Marga)</li> </ol> </li> <li>2. <b>Entre cordilleras:</b> between coast &amp; Andes; 60% of overall production mainly reds <ol style="list-style-type: none"> <li>a. Limarí valley: Punitaqui</li> <li>b. Aconcagua: Panquehue</li> <li>c. Maipo valley: Isla de Maipo, Talagante, Melipilla, Alhué &amp; María Pinto</li> <li>d. Cachapoal valley: Rancagua, Peumo</li> <li>e. Colchagua valley: Nancagua, Santa Cruz, Palmilla, Peralillo, Marchigue</li> <li>f. Curicó valley: Rauco, Sagrada Familia</li> <li>g. Maule valley: Talca, Penciahue, San Rafael, San Javier, Villa Alegre, Parral, Linares, Cauquentes</li> <li>h. Itata valley: Chillán, Quillón</li> <li>i. Bío-Bío valley: Yumbel, Mulchén</li> <li>j. Malleco valley: Traiguén</li> </ol> </li> <li>3. <b>Andes</b> <ol style="list-style-type: none"> <li>a. Elqui valley: Vicuna, Paiguano</li> <li>b. Limarí valley: Monte Patria, Rio Hurtado</li> <li>c. Choapa valley: Salamanca, Illapel</li> <li>d. Maipo valley: Santiago, Pirque, Puente Alto, Buin</li> <li>e. Colchagua valley: San Fernando, Chimbarongo</li> <li>f. Chacapoal valley: Requinoa, Rengo</li> <li>g. Curicó valley: Romeral, Molina</li> <li>h. Maule valley: San Clemente</li> </ol> </li> </ol>  |

# SOUTH AMERICA #3 - BRAZIL

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| HISTORY                       | <ul style="list-style-type: none"> <li>• 1532: Portuguese vines introduced in Sao Paulo state.</li> <li>• 1626: Spanish vines introduced by the Jesuits but later abandoned.</li> <li>• 18<sup>th</sup>: 3<sup>rd</sup> try by Azores settlers to establish vinifera vine cuttings but climate too hot &amp; humid</li> <li>• 1840: first planting of the Isabella American vine on the South Coast or Rio Grande</li> <li>• Early 20<sup>th</sup>: devt of the industry with communication networks btw Rio and southern wine regions + first cooperatives</li> <li>• 1970s: first quality wines driven by international companies and more modern wine making</li> </ul>   |
| KEY REGIONS & CHARACTERISTICS | <ul style="list-style-type: none"> <li>• Concentrated in the extreme south in the state of Rio Grande do Sul</li> <li>• Main sub regions:             <ol style="list-style-type: none"> <li>1. <b>Serra Gaúcha</b> - 38,000ha of vines:                 <ul style="list-style-type: none"> <li>- Southerly location, north of Porto Alegre</li> <li>- Hi altitude (average 700m)</li> <li>- Shallow acid soils, not fertile with hi water retention clay</li> <li>- Hi rainfall (700mm during growing season &amp; 1,800mm/year)</li> <li>- V. small vineyards (average 2.5ha)</li> <li>- Trial to minimise yields on Vinifera varieties</li> <li>- Whites: grapes often picked before full ripeness -&gt; hi malic acid in S.G's whites. MLF or not.</li> <li>- Reds: light and acid wines with some experimentation in new oak.</li> <li>- Sparkling: Asti method.</li> </ul> </li> <li>2. <b>Campanha</b> (or Fronteira) on the border with Uruguay and Argentina.                 <ul style="list-style-type: none"> <li>- Less humid with lower rainfall (850mm/year)</li> <li>- Flatter topography with sandy soils and good drainage</li> <li>- All Vinifera varieties</li> <li>- Espalier system</li> <li>- Rolland consults for Miolo there</li> </ul> </li> <li>3. <b>Sao Francisco Valley</b> (500ha of Vinifera)                 <ul style="list-style-type: none"> <li>- In arid north part of the country, only 9 degrees below equateur</li> <li>- Tropical viticulture with: &gt;1 harvest/yr + Pergola system</li> <li>- Modern reds emerging</li> </ul> </li> </ol> </li> </ul> |
| GRAPE VARIETIES               | <ul style="list-style-type: none"> <li>• 80% of grapes grown are American varieties or hybrids.<br/>Isabella: Vitis Labrusca American hybrid; named after Isabella Gibbs who developed it in early 19<sup>th</sup>; can survive tropical conditions; most common variety in Brazil; develops foxy (≠fruity) wines esp. reds; used for sparkling wines, basic quality wines or table grapes</li> <li>• 20% (~5,000ha) vinifera varieties<br/>Chardonnay, Sémillon, Gewürztraminer &amp; Welschriesling in the high altitude Serra Gaucha</li> </ul>   |
| TRADE                         | <ul style="list-style-type: none"> <li>• #3 biggest wine producer in South America with 60,000ha/330m btls/year. #17 wine producer in the world.</li> <li>• Low Brazil wine consumption internally: 2l/pers/yr</li> <li>• Key producers:             <ul style="list-style-type: none"> <li>○ <b>Vinicola Aurora Cooperative:</b> <ul style="list-style-type: none"> <li>- Largest winery in Brazil w 2,650ha for 42m litres; more than 1,000 families are members</li> <li>- Most international varieties represented; also produces grape juice</li> </ul> </li> <li>○ <b>Miolo Group</b> <ul style="list-style-type: none"> <li>- Established in '08; present in all wine regions w 1,200ha for 12m litres</li> <li>- Internationally-oriented; Michel Rolland consultant there</li> </ul> </li> </ul> </li> </ul>  |
| SWOT DISCUSSION TOPICS        | <p>S: strong presence of multinational investment<br/> W: climate / Brazilian wine: 2l/head/year<br/> O: rise in domestic and export markets + flying winemaker / Rolland<br/> T: climate changes</p>  |

## SOUTH AMERICA #4 - URUGUAY

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| HISTORY  | <ul style="list-style-type: none"> <li>• 1870s: vineyards planted by Basque and Italian settlers.</li> <li>• Tradition of 'peasant' smallholdings (~5ha average vineyard size) that continues today.</li> <li>• Wine initially produced for local consumption.</li> </ul>  |  |  |
| KEY REGIONS (3)  | <ul style="list-style-type: none"> <li>• 80% of vineyards in Montevideo neighbouring departamentos.</li> <li>• Other regions: <ul style="list-style-type: none"> <li>- Cerro Chapeu – Brazilian border</li> <li>- El Carmen – centre</li> <li>- Carpinteria – centre</li> </ul> </li> </ul>  |  |  |
| CLIMATE & WEATHER  | <ul style="list-style-type: none"> <li>• <b>Only South American wine producing country influenced by the Atlantic Ocean</b></li> <li>• Temperate, maritime climate [rainfall &amp; heat summation similar to Bordeaux]</li> <li>• Rain year round -&gt; mildew &amp; black spot risks -&gt; Lyre system to prevent this</li> </ul>   |  |  |
| SOILS & TOPOGRAPHY   | <ul style="list-style-type: none"> <li>• Mostly on rolling hills around Montevideo with deep clay soils.</li> <li>• The 3 C's: Cerro Chapeu, El Carmen &amp; Carpinteria -&gt; poorer soil (interesting)</li> </ul>  |  |  |
| GRAPE VARIETIES (7)  | <table border="0"> <tr> <td> <ol style="list-style-type: none"> <li>1. <b>Tannat</b> ('Harriague') <ul style="list-style-type: none"> <li>- brought by Basque settlers in the 19<sup>th</sup></li> <li>- 36% of all plantings</li> <li>- Tough, deep black berries.</li> </ul> </li> <li>2. <b>Merlot</b> <ul style="list-style-type: none"> <li>- 10% of all plantings</li> <li>- Often used to blend with Tannat to soften tannins</li> </ul> </li> <li>3. Cabernet Sauvignon – 6%</li> <li>4. Cabernet Franc - 4%</li> </ol> </td> <td> <ol style="list-style-type: none"> <li>5. Chardonnay – 7%</li> <li>6. Sauvignon blanc – 6%</li> <li>7. Muscat Hamburg: <ul style="list-style-type: none"> <li>- lowest quality wine producing Muscat</li> <li>- crossing btw M. of Alexandria + Trollinger</li> <li>- black berried table grape</li> <li>- used for Rosé in Uruguay</li> </ul> </li> </ol> </td> </tr> </table> | <ol style="list-style-type: none"> <li>1. <b>Tannat</b> ('Harriague') <ul style="list-style-type: none"> <li>- brought by Basque settlers in the 19<sup>th</sup></li> <li>- 36% of all plantings</li> <li>- Tough, deep black berries.</li> </ul> </li> <li>2. <b>Merlot</b> <ul style="list-style-type: none"> <li>- 10% of all plantings</li> <li>- Often used to blend with Tannat to soften tannins</li> </ul> </li> <li>3. Cabernet Sauvignon – 6%</li> <li>4. Cabernet Franc - 4%</li> </ol> | <ol style="list-style-type: none"> <li>5. Chardonnay – 7%</li> <li>6. Sauvignon blanc – 6%</li> <li>7. Muscat Hamburg: <ul style="list-style-type: none"> <li>- lowest quality wine producing Muscat</li> <li>- crossing btw M. of Alexandria + Trollinger</li> <li>- black berried table grape</li> <li>- used for Rosé in Uruguay</li> </ul> </li> </ol> |
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| VITICULTURE & WINEMAKING   | <ul style="list-style-type: none"> <li>• Vinifera varieties (≠ American or hybrids)</li> <li>• Lyre system</li> <li>• Hi yield issue but rise in more quality products in the recent years.</li> </ul>   |  |  |
| WINE STYLES  | <ul style="list-style-type: none"> <li>• Tannat -&gt; dry fruity reds to be drunk young with riper and softer taste vs. Madiran for export</li> </ul>  |  |  |
| PRODUCTION   | <ul style="list-style-type: none"> <li>• 3,500 growers</li> <li>• <b>4<sup>th</sup> largest South American wine-producing</b></li> <li>• 8,500ha of vines for 850,000hl of wine/year (based on 2005 harvest).</li> <li>• Key producers: Bouza, Pisano, Castillo Viejo, De Lucca.</li> </ul>  |  |  |
| TRADE  | <ul style="list-style-type: none"> <li>• Hi &amp; increasing domestic wine consumption: 32L/pers/yea</li> <li>• <b>Emphasis on export</b> with neighbouring Brazil = 60% of Uruguayan exports.</li> <li>• International interest in Uruguay =&gt; joint ventures: <ul style="list-style-type: none"> <li>- Progreso: Pisano+Boisset (Burgundy's largest wine producer and exporter founded in '61) in 2003</li> <li>- Carrau+Freixenet (largest exporter of Cava)</li> </ul> </li> </ul>   |  |  |
| WINE CLASSIFICATION  | <ul style="list-style-type: none"> <li>• INAVI: Uruguayan National Institute for Vitiviniculture.</li> <li>• 2 classes: <ol style="list-style-type: none"> <li>A. Vino de Calidad Preferente (VCP): 10% of production. Must be made from Vinifera grapes, 75cl or smaller.</li> <li>B. Vino Común (VC): in demijohns &amp; Tetrapacks. Mainly Muscat Hamburg Rosé.</li> </ol> </li> </ul>  |  |  |
| SWOT DISCUSSION TOPICS   | <p>S: differentiation (climate, Vinifera, topography in the 3 / strong exports within Mercosur<br/> W: limited promotional resources / Main grape less recognisable at international level<br/> O: international interest to drive quality (joint ventures) / Uruguay pride in their wine<br/> T: Brazil rise? Fragmented growers' structure vs. cost challenge?</p>   |  |  |

## SOUTH AMERICA #5 - PERU

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| KEY POINTS | <ul style="list-style-type: none"> <li>• <b>Oldest south American wine nation</b> with vines planted in Peru since 1530's. Now, 36<sup>th</sup> largest wine producer in world</li> <li>• Warm winters -&gt; <b>2 crops/year</b> w majority used for table grapes &amp; pisco</li> <li>• Key grapes: <ul style="list-style-type: none"> <li>- Tannat, Petit Verdot, Malbec, Cabernet Sauvignon</li> <li>- Sauvignon blanc, Sémillon, Albilla</li> </ul> </li> <li>• Key producers: Tamaca vineyards (w French consultant)</li> </ul> |
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## SOUTH AMERICA #6 - BOLIVIA

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|------------|--|
| KEY POINTS | <ul style="list-style-type: none"> <li>• Vines brought from neighbouring Peru in 16<sup>th</sup> by monks.</li> <li>• #52 world producer. 20,000ha</li> <li>• <b>Continental &amp; tropical climate (Region III/IV) w vineyards at 2,000-2,500m</b></li> <li>• Key regions: Tarija near Argentina border (Concepcion winery)</li> <li>• Key grapes: Muscat of Alexandria = 80% of vinifera varieties mainly for table wine &amp; spirit production</li> <li>• Espalier, hi vine density &amp; irrigation widely used.</li> </ul> |
|------------|--|