In 2002, the Macau Government liberalized the gaming industry - awarding licences to international casino operators. These developers/operators subsequently invested huge sums in new casino and hotel projects, which also had the effect of diversifying the economy of the city as a MICE (meetings, incentives, conferencing, exhibitions) hub. Several large scale hotel and casino complexes were completed in 2007, Grand Lisboa (Q1 2007), The Venetian® Macao-Resort-Hotel (Q3 2007) and the MGM Grand Macau (Q4 2007). The sheer scale of these projects drove up construction demand to a peak during 2007 and early 2008.

However, with the onset of the global financial downturn in mid/late 2008, the volume of construction work declined sharply. Construction costs are expected to decline in the short term as demand drops.
Construction costs in Macau experienced a mild upward trend between 2001 and 2003. However, tender prices increased significantly during the boom between 2004 and mid-2008. This upward trend was very similar to our experience in other Asian cities, such as Hong Kong and Singapore, over the same period - as presented in the chart below. The surge in labour and material costs was also driven by global rises in commodity prices and was further exaggerated by local demand for construction workers and materials on the mega tourism and gaming projects. According to the Consolidated Labour and Material Index (CLMI), construction prices more than doubled in the period from 2001 to 2008. The small construction industry set-up locally, coupled with enormous demand for construction, combined to tip the supply-demand balance and gave rise to the price surge experienced in the years prior to 2008.

---

# Source: Published data of Material and Labour Cost Index by Statistics and Census Service, Government of Macao Special Administration Region (Base = 100 at Year 2000). The Consolidated Labour & Material Index (CLMI) is based on DLS’s notional weighting of 60% of material content and 40% of labour content. Contractor’s overhead and profit mark-up are not reflected in this index.

* Source: DLS Hong Kong’s in-house data; converted Base = 100 at Year 2000
* Source: DLS Singapore’s in-house data; converted Base = 100 at Year 2000; no forecast beyond mid 2009 for Singapore.
CONSTRUCTION VOLUME

The booming gaming and tourism industries in Macau have created huge demand for large-scale construction projects. The construction floor area completed increased from 370,000m$^2$ during 2000 to over 1.9 million m$^2$ during the peak year of 2007. Perhaps unsurprisingly, construction floor area completed per capita of population in Macau was much higher than that in Hong Kong over the same period, as indicated on the comparison chart below.

The growth in Macau has slowed down significantly since mid-2008 due to the onset of the global financial crisis. The imposition of travel curbs by the Central Government in early 2008, originally intended to cool the over-heating Macau economy, have also had a negative impact. Floor areas currently under construction and new-starts have dropped drastically, indicating that works in the pipeline are shrinking. This trend is expected to continue, at least in the short term.

* Source: Statistics and Census Service, Government of Macao Special Administration Region
@ Source: Census and Statistics Department of Hong Kong Special Administration Region
The construction costs of different building types have all risen by more than 40% between 2005 and 2008, triggered by the economic boom in Macau and a surge in prices of major raw materials for construction.

<table>
<thead>
<tr>
<th>Type</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESIDENTIAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average standard apartments, high rise</td>
<td>750</td>
<td>840</td>
<td>1,030</td>
<td>1,070</td>
</tr>
<tr>
<td>Luxury apartments, high rise</td>
<td>940</td>
<td>1,065</td>
<td>1,275</td>
<td>1,330</td>
</tr>
<tr>
<td>RETAIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average standard shopping centres</td>
<td>1,130</td>
<td>1,280</td>
<td>1,530</td>
<td>1,580</td>
</tr>
<tr>
<td>Prestige shopping centres</td>
<td>1,600</td>
<td>1,830</td>
<td>2,200</td>
<td>2,230</td>
</tr>
<tr>
<td>HOTEL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-Star hotels inclusive of FF&amp;E</td>
<td>1,700</td>
<td>2,000</td>
<td>2,430</td>
<td>2,530</td>
</tr>
<tr>
<td>5-Star hotels inclusive of FF&amp;E</td>
<td>2,250</td>
<td>2,650</td>
<td>3,080</td>
<td>3,200</td>
</tr>
<tr>
<td>OTHERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basement carpark (&lt;3 levels)</td>
<td>680</td>
<td>755</td>
<td>915</td>
<td>950</td>
</tr>
<tr>
<td>Elevated carpark (&lt;4 levels)</td>
<td>440</td>
<td>500</td>
<td>590</td>
<td>620</td>
</tr>
<tr>
<td>Primary and secondary schools</td>
<td>N/A</td>
<td>N/A</td>
<td>815</td>
<td>850</td>
</tr>
</tbody>
</table>

Exchange Rate Used : US$1 = MOP8.00 MOP8.01 MOP8.04 MOP7.98

* Source: DLS’s published data. No published data prior to 2004.

Note: The construction costs above are averages based on fixed price competitive tenders. It must be understood that the actual cost of a building will depend upon the design and many other factors and may vary from the figures shown. The costs per square metre are based on Construction Floor Areas measured to the outside face of the external walls / external perimeter including lift shafts, stairwells, balconies, plant rooms, water tanks and the like. All buildings are assumed to have no basements (except where otherwise stated) and are built on flat ground, with normal soil and site conditions. The costs exclude site formation works, external works, land cost, professional fees, finance and legal expenses.
Davis Langdon and Seah Macau Limited is proud to be the Quantity Surveyor for some prestigious landmark projects in Macau.

○ **ONE CENTRAL, MACAU**

One Central is a complex development comprising 7 blocks of 32 to 38-storey luxury residences offering 800 units, a prestigious shopping centre and a hotel-cum-serviced-apartment tower. It is jointly owned by Shun Tak Holdings Limited and Hongkong Land Limited. The 5-star world-class hotel is operated by Mandarin Oriental Hotel Group. It is built on a 200,000ft² prime waterfront side in the NAPE district.

The retail and residential components are anticipated to be completed by 4th Quarter 2009 and the hotel portion in 2nd Quarter 2010.

○ **MGM GRAND, MACAU**

MGM Grand Macau is a luxury 5-star hotel and casino resort, owned and operated by MGM Mirage and Ms. Pansy Ho.

The development was completed in December 2007. It is located in the NAPE waterfront district. The 35-storey building comprises 2 levels of casino with 375 gaming tables and 900 slot machines, 600 guest rooms and suites, 9 restaurants plus a 10,000ft² ballroom and a 30,000ft² spa.

The building is distinguished by its curved façade and impressive artwork. The hotel portion is linked to a luxury apartment-retail-and-hotel development which is still under construction.
GRAND LISBOA, MACAU

Grand Lisboa, owned by Sociedade de Turismo e Diversoes de Macau (STDM) is a 52-floor, 258m-tall casino and hotel, with a total gross floor area of 135,000m².

The casino and restaurants were opened in February 2007 whilst the hotel grand opening was held in December 2008.

The development comprises 4 levels of basement carpark, 4 levels of casino with 240 gaming tables and 480 slot machines, 4 levels of VIP casino for high rollers, 9 restaurants and bars, 430 guestrooms and suites, spa, nightclub and a rooftop swimming pool.
MACAU CONSTRUCTION COST REVIEW
Davis Langdon & Seah’s Macau Construction Cost Review provides a synopsis of cost information and issues in the construction industry and is intended for information purposes only. Davis Langdon & Seah endeavours to ensure the accuracy and completeness of this information. However, specific professional advice should be obtained and no reliance should be placed on any part of its contents. All rights reserved. Copying in any form or by any means (electronic, photocopying or otherwise) is strictly prohibited without the written permission of Davis Langdon & Seah.

Copyright © 2009 Davis Langdon & Seah. All Right Reserved.
DAVIS LANGDON & SEAH
HONG KONG LTD.
2101 Leighton Centre
77 Leighton Road
Causeway Bay
Hong Kong
t/  852 2830 3500
f/  852 2576 0416
e/  dlshk@dlshk.com
www.dlsqs.com

DAVIS LANGDON & SEAH
MACAU LTD.
14 Andar B
Edificio Comercial Rodrigues
No. 599 Avenida da Praia Grande
Macau
t/  853 2833 1719
f/  852 2833 1532
e/  dlsmacau@dlsma.com

DAVIS LANGDON & SEAH INTERNATIONAL
With offices in Hong Kong, Beijing, Shanghai, Chengdu, Chongqing, Foshan, Guangzhou, Macau, Shenyang, Shenzhen, Tianjin, Wuhan, Brunei, India, Indonesia, Japan, Korea, Malaysia, Pakistan, Philippines, Singapore, Thailand, Vietnam, United Kingdom, Ireland, Spain, Lebanon, Bahrain, UAE, Qatar, Australia, New Zealand, South Africa, Russia and the USA

OUR SERVICES
Quantity Surveying | Project Management | Cost Management | Project Monitoring
Capital Tax Allowances | Due Diligence | Insurance Valuations | Legal Support
Managing Consulting | Research Studies | Sustainable Construction