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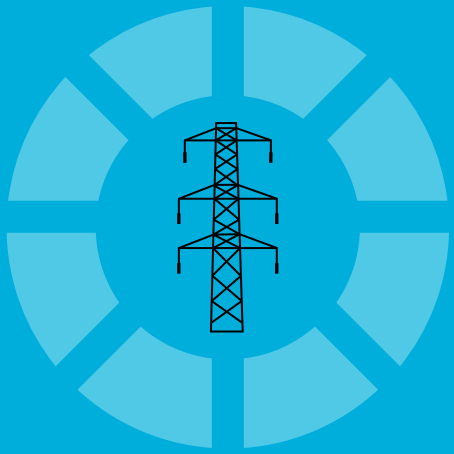
IRAN

INFRASTRUCTURE REPORT

INCLUDES 5-YEAR FORECASTS TO 2014



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Executive Summary

In 2009, we expect the construction sector to expand by 0.74% in real terms to reach US$20.61bn, down from the 11% growth seen in 2008. **BMI** forecasts FY2009/10 growth of 1.4% for the economy as a whole, as the global economic crisis puts the brakes on Iran's recent rapid expansion. Oil prices may have been trending up for the whole of this Iranian year (so far), but turning the economy around will take some time. While the economy continues to expand at these low rates, **BMI** does not expect the construction sector to return to pre-crisis growth levels. By 2014, we expect the sector to reach a value of US$37.65bn, after posting a compound annual growth rate (CAGR) of just under 4% in real terms between 2009 and 2014. This compares with a CAGR of 12.8% between 2004 and 2008.

However, if international sanctions intensify over Iran's controversial nuclear programme, the country may begin investing even more resources in constructing a domestic oil refinery industry. In December 2008, the country announced that it will build seven new refineries at a cost of US$27bn by 2013. This programme is becoming even more vital with the international community threatening to penalise companies that sell gasoline to Iran. According to *Bloomberg* in October 20009, Iran is planning to sell US$555mn in bonds in order to help finance its refinery projects.

In a major development in August 2009, it was announced that India is assessing plans to build a 6,000MW gas-fired power plant in Iran. This will be connected to India via a 1,500km high-voltage transmission line. The project will allow India to access Iran's gas reserves for electricity generation without participating in the pipeline project. According to the *Hindustan Times*, Indian power company **NTPC Ltd** and Indian transmission company **Power Grid Corporation of India Ltd** (PGCIL) are currently assessing the project, which is estimated to cost US$10bn. The 6,000MW gas-fired power plant would be located in Iran, and the majority of electricity generated – around 5,000MW – would then be exported to India.

However, this project is dependent on the stalled multi-billion-dollar gas pipeline project supplying gas from Iran's South Pars filed to India and Pakistan. According to the *Fars News Agency* in September 2009, India is once again eager to join the project. Both India and Pakistan are facing energy shortages and see the 2,700km pipeline as a vital supply route. Although talks over the project have been ongoing for some time, India's interest has waned, leading Pakistan and Iran to threaten to sign a bilateral agreement. However, India is now reportedly showing interest once again in the US$7.4bn project and there is the possibility that a deal could be finalised this year. However, this could reduce the need for India to build a major gas-fired power plant in the country.

Market Overview

Iran

Iran has a well developed transport system that is reliable, cheap and extensive. There is 8,367km of railway, most of which is single-tracked, and 172,927km of roads, of which 72% is paved. There are 331 airports in the country, although a majority – 61% – have unpaved runways.

Although road surfaces are generally excellent and petrol is extremely cheap thanks to subsidies, travelling by road can also be extremely dangerous. To all appearances there are no road rules and the country has one of the highest rates of road accidents in the world. In addition, the authorities sometimes mount informal roadblocks in cities and highways, which can be problematic for foreign travellers – it is advisable to carry ID at all times in case of such an incident. With a number of bus companies offering competitive services, transport by bus is cheap, although it can be quite slow and unsafe, mainly owing to poor driving by other road users. The train network is extensive – covering most of Iran's major cities – and offers efficient services that are safer and more comfortable than bus travel.

Air travel is generally less reliable and frequent than any other form of transport and comes with added risk, as most of the aircraft flown on domestic routes in Iran are ageing.

Iran has a number of ports although many areas of the Caspian Sea and Persian Gulf are highly sensitive politically. The waters around the islands of Abu Musa and the Tunbs in the southern Persian Gulf are particularly sensitive and are militarised. As of November 2008, according to Managing Director of Ports and Shipping Organization Ali Taheri Motlaq, as cited by *Tehran Times*, a fund of US$3.3bn has been invested in Iran's ports. The public sector has provided assistance of US$2.2bn and the rest has been granted by the private sector. This amount has been sanctioned in order to provide equipment and construct infrastructure at the ports. **BMI** believes that by enhancing its ports infrastructure and including better equipment, Iran is trying to capitalise on emerging trade.

In October 2009, as reported by *Azzaman*, Iran was actively rehabilitating its old ports and building a number of new facilities along the Shatt al-Arab Waterway, close to the Iraqi city of Basra. Iran is keen to increase foreign trade and is aiming to become the largest player in the Middle East in terms of commercial ships. Iran's neighbour Iraq is especially concerned about the increased competition from Iranian ports, which may make Iraqi ambitions to increase its own shipping capability obsolete.

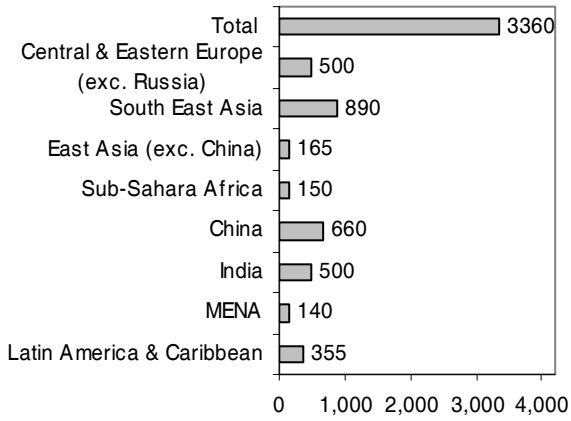
Global Overview

Governments To The Rescue: The Global Surge In Infrastructure Spending

The proliferation of infrastructure-geared fiscal stimulus plans across the world, led by the multi-billion-dollar pledges from the United States and China, breathed some life into the sector, which has been suffering from the credit crunch and investors' risk aversion. Governments and multilateral organisations are stepping in and stepping up public finance allocations for infrastructure projects in an effort to help their economies cushion the blow.

Asia To Lead Demand For Infrastructure

Five-Year Investment Needs Estimates For Emerging Markets, US$bn, 2008-2012



Source: Deloitte Research, Goldman Sachs, World Bank, PriceWaterhouseCoopers, BMI

China announced a US$586bn stimulus plan, with grand plans for transport infrastructure, while US President Barack Obama said in early December 2008 that government spending on infrastructure will be the largest the country has seen since the Highways Programme of the 1950s, arguing that fiscal prudence is not a priority at this point. France, Germany and Australia have all announced multi-billion dollar fiscal stimulus packages, with significant provisions for infrastructure works. The European Commission, through various mechanisms and EU schemes is also channelling funds for infrastructure projects, the latest being the EUR1.7bn for railways under the TEN-T programme. In emerging markets, South Korea, Peru, Israel and Argentina are just some of the countries that have announced stimulus plans to boost economic activity through large public works projects. All of these projects will significantly boost the infrastructure sector, especially the transport segments, and go some way in meeting rising demand from emerging markets for new and improved infrastructure.

According to data available at the time of writing, **BMI** estimates that the stimulus plans announced globally amount to a combined total of approximately US$2.4trn, which amounts to 4.1% of global GDP in 2009, which according to **BMI** forecasts will be US$58.1trn. Approximately US$480bn (20%) is earmarked for infrastructure spending programmes in 2009 and 2010. **BMI's** is among the more conservative estimates of the infrastructure allocations, which vary from US$430-680bn. Though the numbers may change significantly as more governments announce new projects or increase their existing pledges, **BMI** has estimated the infrastructure allocations based on the minimum amount announced by governments thus far that have also clearly stated the value of funds which will go towards infrastructure.

Table: Infrastructure Stimulus Plans List, Correct As Of July 2009		
Country	**Total stimulus package, US$bn**	**Infrastructure allocation, US$bn**
United States	787	98
China	586	263
European Union	254	6.1
Japan	250	na
Italy	105	15.77
Germany	103	22.3
France	33.8	12.7
Argentina	29.2	29.2
Canada	30	12
United Kingdom	29	4.1
Australia	27	3.12
Russia	20	na
Malaysia	16.2	na
Spain	14.45	8 (public works)
Singapore	13.6	3
South Korea	13	1.9
Mexico	8.2	na/NIP in place
Indonesia	7.5	5.7
Netherlands	7.5	na
Hungary	6.9	na
Vietnam	6	6
Israel	5.5	2.5
Taiwan	5.2	1.7
Chile	4	0.7
India	na	27 (2009/10 budget)
Bulgaria	3.66	na
Czech Republic	3.3	na/small amount
Norway	2.87	0.386
Sweden	2.8	na
Portugal	2.2	na
Lithuania	1.65	na
Slovenia	0.8	na
Slovakia	0.332	na

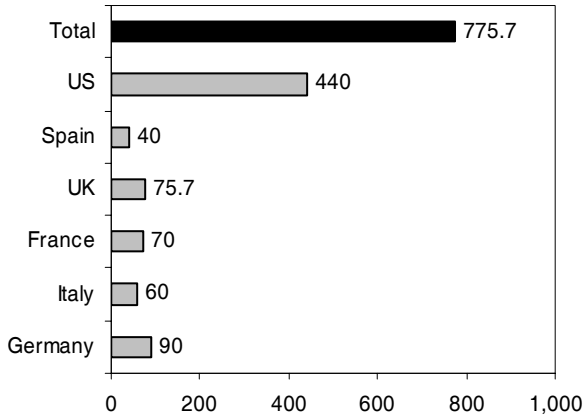
Table: Infrastructure Stimulus Plans List, Correct As Of July 2009		
Country	**Total stimulus package, US$bn**	**Infrastructure allocation, US$bn**
Brazil	na	Growth Acceleration Programme (PAC) in place
Saudi Arabia	126.7 (stimulus budget)	18 (including telecoms and agriculture)
Total	2386.5	480.2

All US$ exchange rate as of 20 April, 2009, except for ARS- July 2009. Source: BMI

The infrastructure deficit globally runs in the trillions of dollars. For developed states the needs are in maintenance and repairs, with the US needing an estimated US$2.2trn in repairs alone over the next five years, while for the developing countries greenfield projects in transport, energy and utilities are necessary to promote and sustain growth. This is especially so for the Brazil, Russia, India and China, whose infrastructure needs increase parallel to their population and growth levels.

Annual Infrastructure Needs Of Developed States

Infrastructure Needs For Sample Of Developed States* , US$bn/year



** Calculated using 2007 US$ converted GDP data. US data only is from the 2009 USSCE Report on US Infrastructure. Source: US Society of Civil Engineers, Deloitte Research, BMI*

We reiterate, however, that the momentum the private sector was creating, by participating in infrastructure programmes through the proliferation of public private partnerships, was a key thrust behind the investments made in infrastructure projects before the financial crisis.

Not only was there a much larger pool of funds made available for new projects (currently locked in the credit markets), but efficiency levels were also much higher, and targets for projects (from budgets to timescales) were better adhered to.

We highlight the inherent time-lag effect of these plans. Decisions on fund allocation, feasibility studies and planning are processes that can take up to 12 months. Adding to that the bureaucracy associated with public bodies assuming significant responsibilities for implementing large-scale capital expenditure programmes, the time-lag between the decision and the actual implementation increases. Absorption rates also decline the greater the bureaucratic edifice is in a country. It is therefore highly possible that many of the projects envisaged by governments will take years to materialise, and possibly at a much higher

cost than initially estimated. Hasty decisions are going to backfire in the long term if governments, in an effort to speed up the creation of new jobs, embark on white elephant projects.

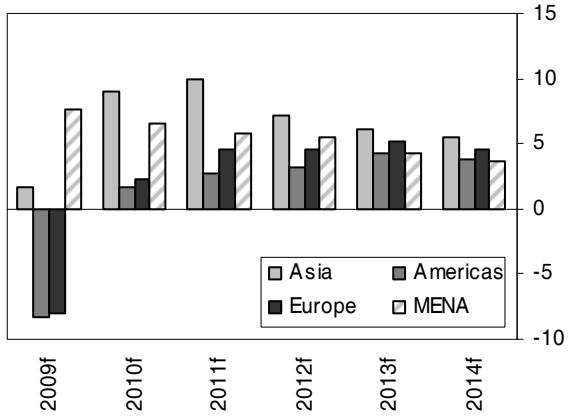
Though we anticipate that government investments will be a cushion to soften the blow for the industry players and the wider economy, we believe that the long-term capital requirements of meeting rising needs lies in the co-operation of the public and private sectors and the proliferation of (well implemented) PPPs.

Industry Looking East For Growth

Infrastructure stimulus plans have never been attempted before on such a global scale and thus expectations of the effects of the plans vary. Industry participants are clearly pinning their hopes on government infrastructure spending. As far as the industry is concerned these stimulus plans are the silver lining to an otherwise bleak outlook for 2009. This is why, in all annual reports thus far, companies across all infrastructure sectors and from all over the world highlighted the expected benefits from the stimulus plans.

Robust Asia Pacific While MENA Rebounds

Global Construction Industry Value Real Growth (%) Forecasts*



** Correct as of October 2009. f=forecast. Source: National Statistical Agencies , BMI*

Major players in the sector have advocated caution in their outlook for 2009 and have trimmed down their expectations for revenue and profit growth this year. A common theme was the reduction in capital expenditure programmes and the focus on organic growth for companies whose balance sheets were suffering from declining activity in the sector. According to a report published in early April 2009 by ratings agency Fitch, the economic downturn will have a delayed effect on European infrastructure majors, culminating in declining revenues and reduced cash flows.

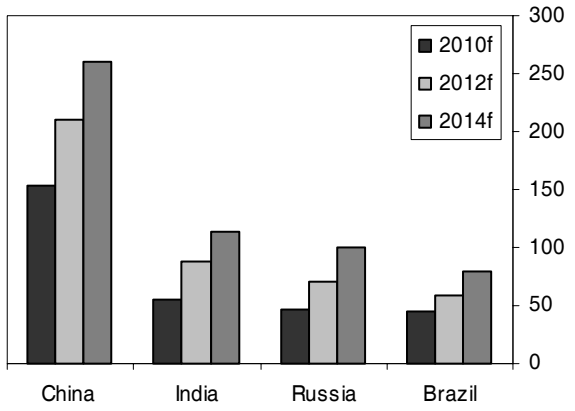
Our forecasts for some of the major infrastructure markets in Asia Pacific and the Middle East have been revised upwards for this quarter. The dust has certainly begun to settle in the sector globally and the fault lines between the stronger and weaker markets have become much more apparent. According to our five-year forecasts for 2009 to 2014, the Asia Pacific region will avoid a recession in the construction sector in 2009, and according to our revised forecasts, so will the Middle East and Africa. Asia's average industry value is boosted by countries like China, Indonesia and the Philippines, while MENA's average is bolstered by more bullish growth expectations for the Gulf states, as well as South Africa.

New Infrastructure Data Series – Some Key Findings

This quarter **BMI** has introduced new data series for infrastructure and its subsectors (Transport and Energy & Utilities). This is an effort to address a significant deficiency in the availability of globally comparable, infrastructure-specific indicators and forecasts across a wide range of countries. **BMI**'s new infrastructure data series enables users to quantify trends and growth patterns in the infrastructure sectors of the 35 main emerging and developed markets out of the 62 countries in **BMI**'s Infrastructure service.

China In A League Of Its Own

BRIC Economies Infrastructure Industry Value, US$bn



f=forecast. Source: National Statistics Agencies, BMI Research

Key Findings In A Nutshell

The key findings from the creation of the new data series is that infrastructure's share in the total construction industry value will continue to climb in the fastest growing emerging markets to the end of our forecast period in 2014. On the contrary, in developed markets, infrastructure as a percentage of total construction industry value will either remain at about the same level or will decline steadily.

The BRIC countries dominate infrastructure industry value, but our data exhibit a large gap between the fourth highest industry value of the BRIC countries (Brazil) and Mexico, which has the fifth highest infrastructure industry value among the countries assessed.

Mexico holds the biggest surprise in our findings. According to our forecasts, Mexico will exhibit the highest infrastructure-to-construction ratio among all 35 countries, with an average infrastructure industry value as a percentage of total construction of 62% between 2007 and 2014.

Methodology And Core Assumptions

BMI's methodology rests on the core assumption that groups of countries with a similar trajectory of economic development will exhibit similar patterns in terms of infrastructure investment levels. This assumption allows the extrapolation of infrastructure-to-construction ratios for a broader group of countries than was previously possible. We have achieved that by grouping countries together in Tiers.

Furthermore, the availability of **BMI**'s Major Projects Databases has enabled us to detect country-specific, historical sub sector-to-sector ratios (for instance airports as part of overall transport

infrastructure) spanning a period of at least three years. The backbone of **BMI**'s new infrastructure data series is the combination of: (a) **BMI**'s macroeconomic and industry value forecasts and (b) the infrastructure and sub-sector ratios extrapolated from the top-down and bottom-up approaches outlined above. Thus, for the first time it has been possible to provide globally comparable, numerically based, historical data series for the global infrastructure industry and its subsectors in transport and energy & utilities, which in turn has enabled the calculation of five-year forecasts.

Infrastructure Tiers Of Countries

Each tier comprises a group of countries that are on a similar economic development trajectory and have similar patterns in terms of infrastructure spending, levels of infrastructure development and sector maturity. This methodology enables us to confirm and overcome any deficiencies in infrastructure-specific data by applying an average group ratio (calculated from the countries for which official data exists) to the countries for which data is limited.

Tier I – Developed States

Common characteristic: mature infrastructure markets, where investments typically target maintenance of existing assets or highly advanced projects at the top of the value chain. According to **BMI** data, infrastructure as a percentage of total construction is found to be on average around 30%.

Countries in Tier I: Germany, Greece, UK, US, France, Hong Kong, Taiwan, Singapore, Israel, Japan, Australia.

Tier II – Core Emerging Markets

Common characteristic: the most rapidly growing of emerging markets, where infrastructure investments are a strategic priority for governments. There is significant scope for new infrastructure facilities from very basic level projects (highways and heavy rail, for instance) to higher value projects (renewables and urban transport). According to BMI data, infrastructure as a percentage of total construction is found to be on average around 45% and above.

Countries in Tier II: Mexico, South Korea, Peru, Turkey, Vietnam, Poland, Hungary, South Africa, Nigeria, Russia, China, India, Brazil, Indonesia.

Tier III – Emerging Europe

Common characteristic: regional socioeconomic synergy of economic development, which has been defined by the recent or pending accession to European structures such as the European Union. Infrastructure development is to a large degree dictated by EU development goals and financed through instruments such as the PHARE and ISPA programmes, and institutions such as the EBRD and EIB. According to **BMI** data, infrastructure as a percentage of total construction is found to be on average between 30% and 40%.

Countries in Tier III: Czech Republic, Romania, Bulgaria, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Croatia, Ukraine.

Industry Trends Analysis

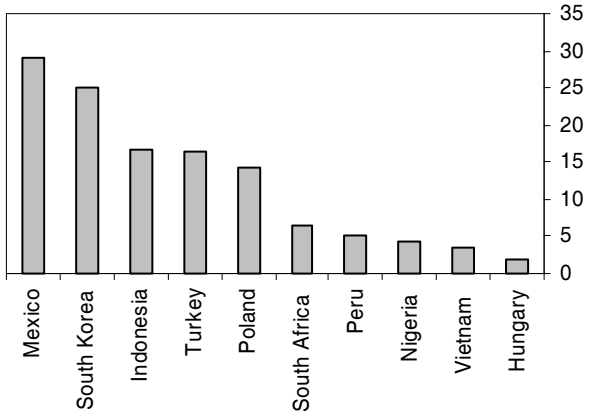
BRICs Dominate

The numbers verify the trends that **BMI**'s infrastructure analysts have been observing in the global infrastructure industry. China dominates the global infrastructure sector in terms of industry value, followed by Brazil, Russia and India.

It is also worth noting the estimated US$15bn gap between the industry value of the Brazil, with the lowest infrastructure industry value among the BRIC countries, and that of Mexico, which has the fifth highest infrastructure industry value among all 35 countries for which **BMI** forecasts infrastructure industry values.

Mind The Gap...Top 10 Non-BRIC EM Infrastructure Markets

Infrastructure Industry Value, US$bn, 2010f



f=forecast. Source: National Statistics Agencies, BMI Research

The magnitude of China's industry value is highlighted by the conclusion drawn from our forecasts that it will not be until at least 2011 that the *combined* infrastructure value of Brazil, Russia and India will surpass that of China.

Interestingly, however, China does not have the highest infrastructure-to-construction ratio. In fact, historical data from the Chinese central statistics bureau indicate that infrastructure's share of the total construction industry value has traditionally been less than a third, below the trend established by other emerging markets peers (Tier II). However, following China's announcement and implementation of the infrastructure-geared stimulus plan, we estimate that infrastructure's share will take a significant leap, and for 2009 onwards will represent closer to 40% of the total construction industry value.

Mexico has the highest infrastructure-to-construction ratio, on average 62% between 2007 and 2014. The government's eagerness to implement the National Infrastructure Plan has been tempered by the reduction of private participation in infrastructure following the global financial turmoil. This, however, has prompted alternative avenues for financing to become available, such as the authorisation of pension funds to participate in listed infrastructure, which has the potential to unlock a vast pool of capital for Mexico's infrastructure sector. Though significant modifications to the scale of the NIP concessions have

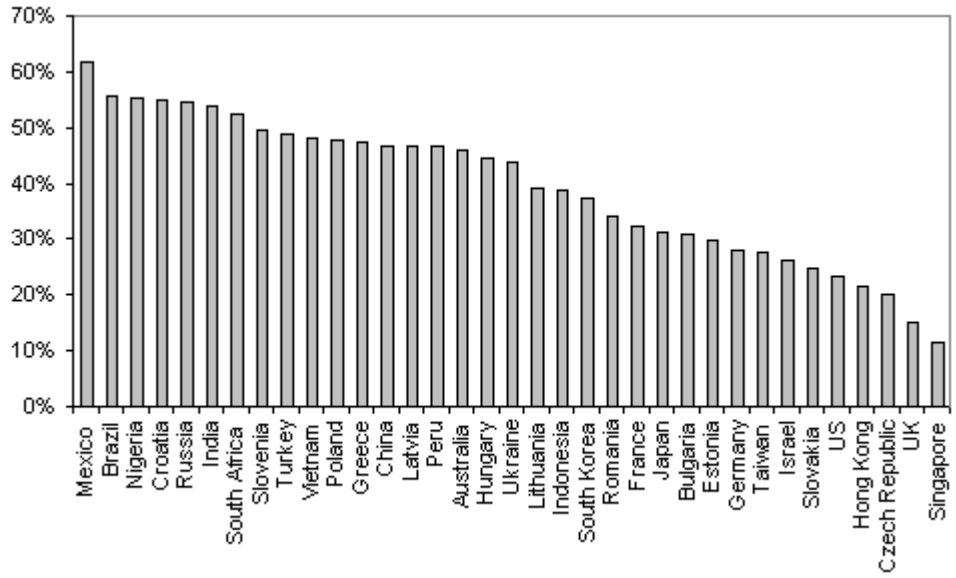
been made as a consequence of the financial crisis, the willingness of the government to pursue the plan is seemingly undiminished.

Russia and Nigeria are the two countries that also exhibit some of the highest infrastructure-to-construction ratios. Years of high oil prices increased oil windfalls for the two oil-producing countries, a large part of which has been invested in infrastructure. For Russia specifically, infrastructure as a percentage of total construction gained even more ground in 2008 and 2009 following the collapse of the residential and commercial construction markets, which by default bolstered the share of infrastructure as part of the total construction industry value.

Singapore and the UK are the countries that have the lowest infrastructure-to-construction ratios. Both are Tier I countries, thus it was to be expected that infrastructure as a percentage of total construction would be low. According to data from the Singapore department of statistics, infrastructure as a percentage of total construction peaked in 2004, when it reached 27%, after which point it started to decline. The UK exhibits the typical characteristics of Tier I countries: a mature infrastructure market, where maintenance surpasses new investments and typically infrastructure has a lower share of the total construction compared with residential and commercial construction.

Mexico's NIP Leaves Its Mark

Infrastructure Industry Value As % of Total Construction, 2007-2014f Average



f=forecast. Source: National Statistics Agencies, BMI Research

SWOT Analysis

Iran Infrastructure Industry SWOT	
Strengths	▪ The outlook for the Iranian construction sector remains relatively positive, with 4.0% real growth forecast on average per year between 2009 and 2014 ▪ Demand is strong in new housing and the oil and gas sectors ▪ Iran has a wealth of natural resources, which is of particular advantage to the construction sector. This wealth includes 9% of the world's confirmed oil reserves and 16% of its natural gas reserves. It also has plentiful reserves of iron ore, non-metallic minerals (including copper, zinc and bauxite) and decorative stones such as marble and granite. Industrial construction is also expected to be a major growth driver in the forecast period ▪ The country is investing heavily in its refinery sector, which should help the country become more self-sufficient
Weaknesses	▪ Not enough housing capacity is added annually. Annual demand for housing is for around 1.5mn dwellings, but only around 700,000 are completed per year, resulting in a huge backlog ▪ The Iranian construction industry has been criticised for having poor building standards. Constructors are unwilling to invest money in modern technologies, building codes are widely disregarded, and municipal governments have failed to enforce them or run a proper inspection system ▪ There have been reports of widespread corrupt practices, including routine payment of bribes to officials by major construction companies ▪ Exorbitant land prices account for half construction costs ▪ Growing government deficit could impact public spending on infrastructure projects, and already the authorities are placing greater reliance on private investment
Opportunities	▪ Conditions for foreign companies and contractors were eased as a result of the introduction of the Law for the Attraction and Protection of Foreign Investment (LAPFI), approved in 2002 ▪ The Iranian government is actively seeking opportunities to participate in the Iraqi reconstruction drive following the recent war. This may provide a boost to domestic construction firms ▪ Threat of foreign sanctions will force Iran to invest heavily in its own infrastructure and heavy industries
Threats	▪ Iran is located in a high seismic activity zone and recent earthquakes are costing the country millions in reconstruction work. The long-term rebuilding costs for the quake-hit city of Bam have been estimated at up to US$1bn ▪ Sanctions designed to halt Iran's nuclear programme have resulted in investors pulling out of the country. As a result Iran is looking to expand its refining capacity to reduce its reliance on fuel imports ▪ There are now threats of a ban on gasoline imports, which would further derail Iran's economy

Iran Political SWOT	
Strengths	▪ Since the overthrow of the Pahlavi family in 1979 there has been some reduction in the level of political corruption, and wealth distribution has improved marginally ▪ The Revolutionary Guard and Basij militia are fiercely loyal to the Supreme Leader, helping to maintain social stability
Weaknesses	▪ The Republic has one of the poorest human rights records in the region, and the authorities do not hesitate to quell dissidents. A number of journalists are being held in custody ▪ While, ultimately, decision-making rests with the Supreme Leader, the regime is heavily fragmented and consensus is hard to reach ▪ Widespread perceptions of electoral fraud during the course of June's presidential elections have damaged the regime's legitimacy in the eyes of many Iranians
Opportunities	▪ The *majlis* (parliament) is more than just a rubber stamp – the move by 150 parliamentarians (out of 290) to hold the president accountable for his handling of the economy is a positive indication that checks exist
Threats	▪ Ongoing nuclear tensions raise the prospect of further US and UN Security Council sanctions and the, albeit very limited, possibility of a military strike by the US or Israel ▪ Ethnic tensions are on the rise ▪ High youth unemployment ▪ The rising influence of the Revolutionary Guards within the political and economic arena may present a challenge to the status quo over the long term

Iran Economic SWOT	
Strengths	▪ Iran has the world's second largest proven oil reserves after Saudi Arabia, and the world's second largest proven gas reserves after Russia ▪ Oil and gas aside, the republic is rich in other resources and has a strong agricultural sector
Weaknesses	▪ Local consumption of hydrocarbons is rising rapidly and this, coupled with ageing technology in the oil and gas sector, will have a negative impact on its oil- and gas-exporting capacity ▪ After a concerted effort to reduce public debt in recent years, there are signs that it is once again rising
Opportunities	▪ The gas sector remains underdeveloped, and there is considerable room to maximise this source of revenue
Threats	▪ A decline in world oil prices will have a marked impact on the economy. Although an Oil Stabilisation Fund (OSF) exists to protect the economy at times of weaker oil prices, it has increasingly been used to fund government overspending and could be close to empty ▪ A further deterioration in Iran's relations with the international community over its nuclear programme could result in the imposition of more extensive economic measures by the UN Security Council or the US ▪ There is a serious risk of capital flight owing to fears of conflict or sanctions

Iran Business Environment SWOT	
Strengths	▪ The Foreign Investment Promotion and Protection Act (FIPPA) does give some protection to foreign investors and now allows relatively good terms for the repatriation of profits ▪ Although stifled in the years since the Islamic revolution, Iranians have traditionally been renowned for their entrepreneurial skills, a factor that is potentially a strong pull for foreign investors
Weaknesses	▪ Progress on the privatisation front remains slow, despite some recent encouraging signs ▪ Foreign firms are currently unable to own Iran's hydrocarbon resources. The resultant 'buy back' deals offer less advantageous terms than those elsewhere, limiting hopes of new investment
Opportunities	▪ As part of the fourth Five-Year-Development Plan (FYDP) 2005-2009, the government will end tax and customs concessions currently afforded to the country's quasi-statal *bonyads*, or foundations ▪ The government has inaugurated the first phase of an oil swap project with Russia, Kazakhstan and Turkmenistan. The project will compete with the rival US-backed pipeline that will run to the Mediterranean from Baku in Azerbaijan, through Georgia, to Ceyhan in Turkey
Threats	▪ UN and EU sanctions on the Islamic Republic pose a significant threat to the participation of foreign firms in the oil and gas sector ▪ Central bank supervision of charitable funds will be stepped up sharply, after it emerged that a number of these funds had collapsed due to indiscriminate lending practices

Major Infrastructure Developments And Key Projects

Transport Infrastructure Overview

Iran's transport sector is currently catering for the needs of a population numbering approximately 73.2mn and the business needs of an economy worth US$345.8bn. We believe that there are upside predictions for both of these numbers and this will place a strain on the country's transport infrastructure if it does not continue to expand and modernise. By the end of our forecast period, Iran's population is expected to number 77.7mn.

Going Abroad

Iran's transport sector has grown around catering for the needs of its import and export sectors. The main export destinations for Iranian products are Japan, China, Italy, Turkey and Korea. The main import sources for Iran are based in Europe, with Germany and France topping the list and Italy coming fourth. The country also imports goods from China and the UAE. **BMI** predicts that Iran's exports will drop from US$98.3bn to US$60.1bn as a result of the global financial crisis. Meanwhile, imports will face similar short-term problems falling from US$66.8bn in 2008 to US$53.4bn in 2009.

Flying In

The country has a total of 331 airports, of which 129 have paved runways. The country has yet to develop a tourist sector, with airports mainly used by business travelers. With Iran being the second largest OPEC oil producer and sitting on the world's second largest gas reserves, its airports cater for the needs of business associated with these two areas. Airports also cater for the country's freight sector, with air transport making up approximately 4.3% of total freight transported. In December 2008, Iran announced an air-services agreement with the UAE, which would open more Iranian airports to flights from the UAE. Present allotments have been increased by 50% and the flights will help to service the estimated 300,000 Iranians currently living in the UAE.

Driving Up

BMI predicts that the number of cars on Iranian roads is set to grow. Car sales are set to reach 1.2mn by 2012. This will place a strain on the country's road infrastructure and the roads may need to be repaired more often as they deal with greater loads and traffic. The country's roads must bear the brunt of most of the freight transported within its borders. Roads will make up 66.3% of freight transported in 2009 and this is set to grow to 67.3% in 2012. Iran has a total of 172,927km of roads, of which 125,908km is paved, and the country boosts 1,429km of expressways. The country's road network links in with its neighbours. The 2,500km A1 highway runs from Bargazan on the Turkish border, across Iran, to the Afghan border in the east. The A2 links the Iraqi border in the west to Mirjaveh on the Pakistani frontier.

In January 2009, it was reported by the *Islamic Republic News Agency* that Iran and Azerbaijan have finalised a road transportation deal that includes a reduction in tariff charges. The memorandum of understanding (MoU) was signed at the conference of the Baku-Tehran Joint Roads Transportation Commission. Industry observers believe that the deal aims to improve the transport of freight by road in the region. **BMI** notes Iran's recent efforts to develop its international freight transport relations, particularly with Central Asian countries.

However, the looming threat of US-imposed gasoline import sanctions would inflict an additional financial burden on the Iranian government, damaging further its ambitious energy expansion plans and also hamstringing areas such as freight transport. Despite holding the world's third largest oil reserves, Iran has struggled to meet growing domestic fuel demand owing to burdensome subsidies and inadequate refining capacity. The idea of imposing restrictions on Iranian gasoline imports in response to its nuclear programme was first floated by US President Barack Obama in October 2008, when he stated during a presidential debate that the measures would start 'changing [Tehran's] cost-benefits analysis'. The proposal appears to have been gathering support since, with an Israeli official telling *Reuters* on August 3 that Tel Aviv was discussing with Washington DC the feasibility of a fuel import ban.

By Rail

Unlike a number of other Middle Eastern nations, Iran has already developed a railway system. The network carries not only passengers but also freight. Iran’s railway network services approximately 11% of the total freight transported in the country. There is a total of 8,367kms of railway track in the country, of which the majority is standard gauge, but the country also has a broad-gauge system. Only 146km of the track is electrified. The network is based on lines centred in Tehran. Three run southwards: to Bandar Imam Khomeini on the Gulf (with a spur to Khorramshahr), to the Gulf port of Bandar Abbas near Qeshm, and to Kerman (with a spur running to Isfahan and Shiraz). Of the northern lines, the one running to Mashhad has been extended to connect to the Turkmen system (which operates on a different gauge) at Sarakhs, and has a spur running up to Gorgan. Another line connects Tehran to Tabriz and then splits to link with the national rail networks of Turkey and Azerbaijan.

The cost of transporting freight by rail is around one-sixth of road transportation. According to the minister of industries and mines, Iran is in discussions with a number of countries, including Cuba, concerning the export of rail services and technology.

BMI notes that although Iran's rail freight sector is falling behind the road sector, a plan to privatise wagons should attract interest, as there is growth potential in the market. **BMI**'s view is based on analysis of rail infrastructure projects that are under way or have been announced and will connect Iran's railway to other countries, thus offering increased access for rail freight. Work is under way on a railway to connect Iran with Iraq, and the country is developing its freight transport relations with the landlocked

states of central Asia, with plans to launch a container train route between Almaty in Kazakhstan, Tashkent in Uzbekistan, and Istanbul in Turkey.

By Boat

Since the war with Iraq, Bandar Abbas has overtaken Khorramshahr as the country's major port, handling three-quarters of the 20mn tonnes of cargo that pass through Iran's Gulf ports each year. Smaller ports at Bushehr, Bandar Lengeh and Chah Bahar have also assumed greater importance. Kharg Island is the main oil terminal. In addition, the Caspian ports have benefited from Iran's attempts to develop its relations with the central Asian republics, while modernisation programmes have been implemented at Bandar-e Anzeli and Chah Bahar. Iran has also developed a transport network on its waterways. The major system is 850km long and is based on the Karun River and Lake Urmia.

Container throughput at the Iranian port of Bandar Abbas slumped by 7.2% year-on-year (y-o-y) in Q109. The fall is in line with **BMI**'s predictions of a decline of 6.4% in throughput for 2009. **BMI** notes that the container results for Bandar Abbas for Q109 demonstrate the beginning of a decline, which we expect to see continued throughout the rest of the year. In 2008, the port broke the 2mn TEU mark with a y-o-y growth of 16.1%. We believe that in 2009 the port will not be able to recreate such a throughput figure as Iran's trade is set to decline in line with the fall in global trade that has been brought on by the economic downturn. **BMI** forecasts that container throughput through the port of Bandar Abbas is set to fall by 6.4% over 2009 to 1.87mn TEUs. This decrease is in line with Iran's trade volumes as a whole, which **BMI** predicts will decline by 4.4% in 2009. According to the *Fars News Agency* in January 2009, Iran's Ports and Shipping Organization (PSO) is planning to spend IRR2,000bn (US$204mn) to construct new ships and modernise ports. Iran needs to build approximately 40 new vessels by the end of 2009 in order for its fleet to meet demand. To this end, Iran's state shipping company, Islamic Republic of Iran Shipping Lines (IRISL), will receive three new supertankers by mid-2009, boosting its fleet by 12%. Meanwhile, the company is planning to increase its number of oil tankers to 38 by 2011.

New And Ongoing Transport Projects

Airports

Airports	
Q1 2009	▪ In July 2009, Iran's Iman Khomeini International Airport (IKIA) announced that it had received the international certificate of Integrated Management Systems (IMS). The award is given for performance in areas such as professional hygiene, protecting the environment and management quality. IKIA is the second airport in Iran to achieve this award and is indicative of improving standards in the sector. This should have a positive impact on international freight traffic, as the air infrastructure in the country begins to reach international standards. BMI forecasts that air freight in the country will increase by almost 5% per year to reach 13mn by 2013.
Q4 2008	▪ In November 2008, the *Fars News Agency* reported that Iran Airport Holdings had announced that 60 airport projects would be completed by the end of March 2009. The projects, which are taking place at 30 airports, cost a total of US$93mn. Of this total, around a third is allocated for improvement of services. In total, Iran has 54 airports, of which eight are international. The improvement to the airport infrastructure is vital as passenger numbers have increased by 8% in the first half of the current Iranian year, which ends in March 2009. However, in October 2008, the *Mehr News Agency* reported that there were more than 100 incomplete infrastructure projects in the Iranian air transport sector.

Railways

- In September 2009, the Islamic Development Bank (IDB) expressed an interest in helping to fund a railway project linking Iran-Turkmenistan-Kazakhstan. The preliminary agreement on the railroad was agreed in April 2007 between the governments of Turkmenistan and Kazakhstan and the total route is more than 1000km, of which around 100km would be in Iran. The total cost of the project is estimated at US$650mn and it is reported by the *Fars News Agency* that Iranian firms will construct the railroad. The first phase of the project will link Iran to Kazakhstan. Iran's Minister of Road and Transportation claims that the rail sector has attracted US$24bn in foreign investment, which will be used to help construct more than 10,000km of rail lines.

- In September 2009, the IDB approved a loan of EUR20mn (US$28.5mn) to the Iranian state-owned Islamic Republic of Iran Railway. The loan will be used to expand the rail transportation fleet, develop related infrastructures, and implement ongoing projects undertaken by the Iranian railway. **BMI** believes the new and improved railway links will prove beneficial to the country in enhancing trade activities with foreign countries by offering better access for freight transported by rail.

- Meanwhile, in August 2009 it was reported by the *Fars News Agency* that Pakistan's Minister of Railways is considering linking the Islamabad-Tehran-Istanbul to China. After the first freight trains started running on the 6,500km Islamabad-Tehran-Istanbul rail line in August 2009, Pakistan is already looking for ways to extend the service. The ultimate aim is to build a rail link that would run between the Economic Cooperation Organization member-states – Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan and Uzbekistan – and Europe and Central Asia.

- In October 2009, Azerbaijani, Iranian and Russian stakeholders announced they were to meet to discuss the potential of a North-South transport corridor, which would link Europe, India and South East Asia via Russia. The total project cost is estimated at US$400mn, with a substantial portion of the investment being planned for Iran, which has no rail link running to the Azerbaijani border. It is forecast that the transport corridor will carry 5mn tonnes of freight in the first year, eventually rising to 10-15mn tonnes of freight.

Railways

Q3 2009

- In August 2009, the *Fars News Agency* reported that operations had resumed on the Razi Khoy segment of the Iran-Turkey railway after renovations had been completed. The section of the railway had been destroyed early in the month after a landslide. Meanwhile, Iran, Pakistan and Turkey have recently met to discuss improvements to the railway network in the region in order to speed transit traffic. Two projects – upgrading the Quetta-Taftan line, which runs between Iran and Pakistan and a bypass around Van Lake in Turkey – have already been submitted to the Islamic Development Bank for financing. The cost of the project is estimated at around PKR45bn (US$541mn). Other projects being planned include the electrification of the Tehran-Tabriz rail line.

- In July 2009, as reported by the *Fars News Agency*, the Minister of Road and Transportation announced that 6,000km of railways would be constructed in Iran. What is more, this major investment project is to be conducted solely through foreign funds. However, in the current global economic climate, such financing could be hard to come by. Also, renewed pressure is being placed on the country by the international community due to its nuclear ambitions, which could further restrict investment options. One project that could be up for grabs, though, is a planned rail line between Gorgan-Bionourd-Mashad, after the Austrian company in charge of the project reportedly failed to meet its commitments.

- In August 2009, it was reported that Iran had begun work on the first monorail system in Qom. The first phase of the light-rail project includes the construction of a 6km-long rail line, which will improve access to the city's grand mosque. The estimated cost of the first phase is over US$120mn and it is expected to be completed within 30 months. On completion, the monorail will be 18km long in total, and aims to ease the traffic congestion in the city. Iran already has a developed railway system carrying both passengers and also freight. Iran's railway network services approximately 11% of the total freight transported in the country. But, out of a total of

Railways

8,367kms of railway track, only 146km is electrified.

Q2 2009

- In May 2009, Iran and China signed economic agreements worth US$17bn. Owing to the size of the trade accords, Chinese companies will also help to develop Iran's railway sector. In 1994, trade between the two countries stood at US$400mn. Taking the new deals into account, trade should swell to US$50bn by 2014. However, to cope with these volumes, Iran will have to improve its communications networks, a factor taken into account by its Chinese counterparts. One recent project that has been announced is a rail link between Iran and China via Kyrgyzstan.

Q1 2009

- In March 2009 it was reported by the *Fars News Agency* that Iran and Armenia are planning to co-operate in the transport sector. Meetings between Iran's Minister of Roads and Transportation and Armenia's Minister of Transportation and Communications were held as the two countries discussed the planned Iran-Armenia railway. Armenia currently only has one international rail link, which travels through Georgia. The new project – which has an estimated cost of US$2bn – would see around 80km of new railway track constructed in North West Iran. Stretching from the Armenian border to the Iranian town of Marland, the railway would then join Iran's Tabriz-Jolfa line.

- In March 2009, Iran, Russia and Azerbaijan agreed a memorandum of understanding to build a railway between Iran and Azerbaijan. Construction on the project will be undertaken by a joint company and will be funded by the local and international banks of the three countries. The link will run from the Iranian city of Rasht to Astara in Azerbaijan. The project is part of a wider scheme to build a north-south corridor, which will allow the transport of goods from Southern Asia to Northern Europe. The new route – which has been agreed in principle by India, Russia and Iran – will provide strong competition to the Suez Canal in reduced journey times and financial savings. BMI notes that Iran's rail freight sector is falling behind the road sector and this can be seen as a positive effort by the government to shift customer focus from road to rail transport. BMI believes the new railway link will prove beneficial in enhancing trade activities between the countries and will offer better access for freight transported by rail.

- In March 2009, the *Tehran Times* reported that Pakistan was looking to form a joint railway with Iran and Turkey. The planned line would link the capital cities of Islamabad, Tehran and Istanbul.

Q4 2008

- In December 2008, the *Fars News Agency* reported that private companies are to be invited to participate further in Iran's freight rail sector, with permission for private enterprises to operate 5,000 wagons to be given in early 2009. BMI points out that the percentage of freight carried by rail in Iran is slipping against road, and a partial privatisation of the sector could boost growth in the sector, especially as a number of cross-border infrastructure projects are under way that will improve the country's rail links with its neighbours. *Fars News Agency* quotes the deputy head of Iran's State Railways Company, Mahmoud Keimanesh, as saying that 'the company will hold a tender in January' to attract interest in the privatisation. *Iran Daily* reports that 50% of wagons in

Railways

Iran's rail sector are operated by private firms, and that there are plans for locomotives to take the same privatisation route. BMI believes that further privatisation of wagons will help Iran's rail freight sector. Privatisation increases competition, with private companies vying for clients by setting competitive rates. Private companies also put more emphasis on profit than state-owned operators, and so are more prepared to invest in ensuring that their operational capacity remains up to scratch, for example by upgrading their rolling stock. Therefore, further privatisation could be what Iran's rail freight sector needs to grow further.

Q4 2008

- In November 2008, Iran and Uzbekistan signed a nine-article pact on railway co-operation. The deal – the result of a two-day meeting in Tehran between the managing directors of the Iranian and Uzbek national railway companies – aims to improve the transport of freight by rail in the region. BMI notes Iran's recent efforts to develop its international freight transport relations, particularly with central Asian countries.

- In early November 2008, Russian Railways (RZhD), Russia's state-owned rail monopoly, announced that it would be willing to construct the Armenia-Iran rail link if financing for the project was in place. The rail link has been in the pipeline since 2006. A number of news sources have cited the cost of the project at between US$1bn-2bn. The Asian Development Bank (ADB) has already put forward a US$1.5mn loan for a feasibility study. The railroad will link the Iranian city of Marand, in the north of the country, to the border with Armenia, on the Aras River. From Marand, the railway will link with the Tabriz-Jolfa line. Once the contract has been approved, the construction of the railway will take up to five years.

- In November 2008, according to PTI, disagreements arose over a railway project to be implemented by an Indian company in Iran. Iran wants the project to be undertaken on build-operate-transfer (BOT) basis, while the company wants to undertake it on a build-lease-transfer (BLT) basis. The project, to be undertaken by Rail India Technical and Economic Services (RITES), consists of electrification of a railway track and supply and maintenance of locomotives.

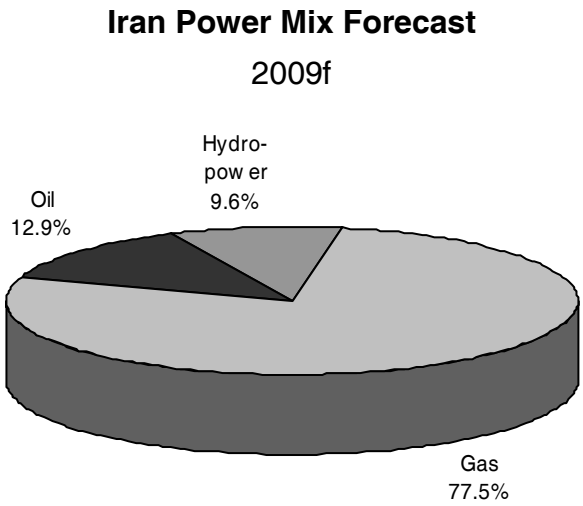
- In October 2008, Armenian minister of transport and communications, Gurgen Sargsyan, announced that the planned railway to link Armenia with Iran will take five years to build. The cost of the project is estimated at US$1.5-2bn.

Energy And Utilities Infrastructure Overview

Supply Meeting Demand But Still Susceptible To Power Cuts

Data for Iran's electricity generation and consumption show a country capable of meeting its power demand. In 2009, **BMI** estimates that electricity generation will reach 205TWh, more than meeting the country's power demand of 185.7TWh for the year. This looks set to continue over the medium term with consumption forecast to climb to 212TWh in 2013, but being met by supply, which will increase with it and reach 247.8TWh. Iran is developing a surplus, and the country's export potential is rising from an estimated 21TWh in 2008 to 36TWh in 2013, assuming 4.2% annual growth in electricity generation.

To realise this possibility, Iran and Russia have signed a letter of intent on energy co-operation and are constructing shared power grids.



f=forecast, Source: BP Statistical Review of World Energy, June 2008, BMI

Filling Up On Gas

Although Iran has the installed capacity to meet demand, the country's power sector is susceptible to blackouts since the sector is not diversified. Iran has the world's second largest reserves of gas, and has built a power sector that is overwhelmingly reliant on this indigenous fuel. Gas is expected to account for 77.6% of the country's total power generation by 2013. New gas-fired projects include two 1.04GW combined cycle plants in the south, a 1.3GW combined cycle plant at Arak, a 1GW facility in Bandar Abbas, and a 1GW combined-cycle plant being built by the **Tehran Regional Electricity Company** in Qom.

However, despite its massive gas reserves, Iran's plans to become a significant exporter of liquefied natural gas in the medium term were truly scuppered by US-led pressure against Tehran's nuclear ambitions in 2008, as international oil companies suspended various projects. In February 2009, French major **Total** countered Iranian claims that it was set to finalise a US$5bn deal on March 20 2009 to develop Phase 11 of the South Pars natural gas field. A Total spokesperson told *Dow Jones Newswires* that the company did not expect to sign a deal relating to the development of the South Pars gas field in the near future.

According to a statement by Mahmoud Zirakchian-zadeh, managing director of **Iranian Offshore Oil Company** (IOOC), in April 2009, Iran is expected to finalise two gas development deals worth US$7bn

in the near future. Zirakchian-zadeh told *Islamic Republic of Iran Broadcasting* (IRIB) that his company was currently holding negotiations over the financial aspects of two gas development contracts with one European company and India's state-owned **Oil and Natural Gas Corporation** (ONGC). Without specifying which European company IOOC was engaged in negotiations with, he said that the European company had submitted a development plan for the offshore Lavan gas field, while ONGC was looking to develop the Farzad gas field.

In addition, the Iran-Pakistan-India (IPI) gas pipeline is still on the table. The US$7.23bn IPI pipeline project has been held back by years of unfruitful negotiations with limited progress as tensions between India and Pakistan heightened. The IPI is planning to transport gas from Iran's South Pars field to Pakistan and India. India is keen to get access to Iran's gas-rich fields, but is facing international pressure from the US not to participate with Iran. This is due to continuing political tension between Iran and the US over Iran's uranium enrichment programme. Tensions between Pakistan and India are also playing a big role in derailing the project.

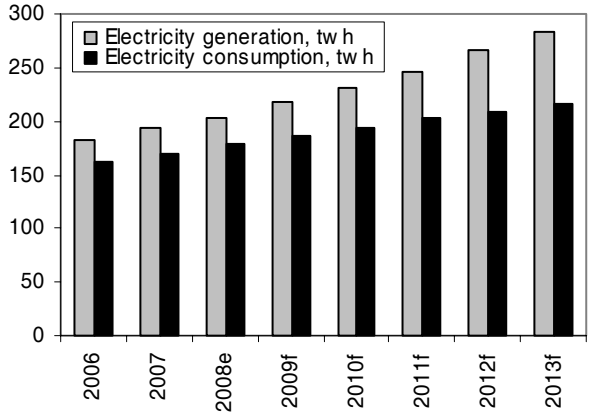
In August, during the three-day visit to Iran of Sultan Qaboos, the ruler of Oman, talks were expected to focus on expanding economic and trade links between the countries, with greater co-operation in the gas sector high on the agenda. Oman is reportedly keen to secure an agreement to develop the Kish field and to import the gas produced there in order to supply its liquefied natural gas (LNG) export facilities.

Moving Away From Domestic Oil Use

The second largest contributor to the power mix in Iran is oil. Being OPEC's second largest producer, Iran has considerable indigenous reserves to turn to. In 2009, oil will make up 13.7% of the country's power mix, but this is expected to shrink over the medium term, falling to 10.7% in 2013, as the focus increasingly turns to gas and, eventually, nuclear power.

Iranian Electricity Generation And Consumption (TWh)

2006-2013



e/f= BMI estimate/forecast. Source: BP Statistical Review of World Energy, June 2008, BMI

In December 2008, the head of the **National Iranian Oil Refining & Distribution Company** (NIORDC) said the country plans to invest US$27bn in its programme to build a further seven oil refineries. According to Seyed Noureddin Shahnazizad, once the refineries are onstream, the country's production capacity in gasoline and gasoil will increase by 190mn litres per day (1.2mn b/d) and 180mn litres per day (1.13mn b/d) respectively. Iran is looking to secure investment for a major expansion of its refining capacity as the

government proceeds with the gradual elimination of gasoline and gasoil subsidies by 2012. Refinery capacity needs to be expanded in order to meet domestic demand for refined products and to reduce the country's dependence on fuel imports. The latter point is of particular interest, as there is speculation that the US may seek to target Iranian gasoline imports in fresh economic sanctions aimed at halting Iran's uranium enrichment programme.

In August 2009, according to state media reports, Iranian officials have signed new deals on the back of Memoranda of Understanding (MoUs) agreed with Chinese companies to develop the Iranian refining industry. The deals were allegedly the culmination of a visit to Beijing by an Iranian delegation headed by Nureddin Shahnazizadeh, managing director of the **National Iranian Oil Refining and Distribution Company** (NIORDC) in the last week of July. A report in the Iranian oil ministry's *Shana* news service claims that NIORDC signed deals with **China Petroleum & Chemical Corporation** (Sinopec) to expand the Abadan refinery by 210,000 barrels per day (b/d) and to construct the new Hormuz refinery in the south of the country. The *Mehr News Agency*, however, reported that the deals concerned the Abadan and the Persian Gulf Star refineries. Both the Hormuz and Persian Gulf Star plants are part of Iran's refining industry expansion programme that envisions the construction of seven greenfield plants and the expansion of existing facilities in order to reduce the country's dependence on fuel imports.

Water Power

Iran has developed a hydropower sector. **BMI** is predicting 19.4TWh of hydropower generation by 2013, accounting for a potential 7.8% of total generation. The sector is susceptible to drought – if the country does not get enough rain, water levels in the hydropower dams will fall, curtailing the output at the hydropower facilities.

Developing Nuclear No Matter What

The country is currently in the process of developing a highly controversial nuclear power sector. Russia has helped Iran complete the construction of the Bushehr nuclear power station and has started delivering fuel to the facility. The programme is viewed with suspicion by some members of the international community, who fear that Iran may go on to develop a nuclear weapon. **BMI** believes that the nuclear facility will start contributing to the country’s power mix in 2010, and by the end of 2013 will contribute 3.7% of Iran’s energy.

Iran carried out the first testing of its Bushehr Nuclear Power plant on 25 February 2009. The controversial power plant has been years in the making and it is finally complete. The nuclear plant was built with the help of Russia, and according to Sergei Kiriyenko, head of the Russian nuclear agency, 'The construction stage of the nuclear power plant is over, we are now in the pre-commissioning stage, which is a combination of complex procedures', as quoted by *AFP*. It is estimated that the plant will contribute 500MW of power to the Iranian grid by summer 2009.

Iran's nuclear programme, and not its domestic political dynamics, are of primary concern to the West. With Tehran continuing to build up its uranium enrichment capabilities and President Mahmoud Ahmadinejad likely to keep up his anti-West stance during his second term, Iran's relations with the West will remain highly strained. June's controversial presidential elections and the government's robust response to the subsequent unrest have not materially altered Iran's international relations with the West. The most recent IAEA report on Iran's nuclear programme (published in late August) shows that the Islamic Republic continues to build up its uranium-enrichment capabilities. As a result, the push for stiffer international sanctions against the Islamic Republic is likely to grow stronger. For now, US President Barack Obama is persisting with the policy of engagement with Tehran that he has pursued since taking up office at the start of the year. However, US Republican politicians are losing patience with this course of action. Indeed, on September 16, Mike Pence, a senior Republican in the US House of Representatives, stated: 'The time is now for Congress to enact the strongest possible sanctions against the regime in Iran.' If sanctions continue to intensify it may spur another round of investment in Iran’s energy infrastructure as the country tries to become as self-sufficient as possible.

No Coal And Limited Plans To Go Green

Iran has not developed, and has no plans to develop, a coal-fired power sector. Apart from hydropower, the country has made very little progress in developing a renewables sector. Iran is believed to have the potential to produce 6.5GW of electricity with wind energy. It also has solar power potential. In January 2009, the Iranian Renewable Energies Organization (IREO) stated that Iran's first solar power plant had gone into operation in Shiraz. The plant has a capacity of 250KW that can be extended to 500KW by establishing larger solar panels.

Meanwhile, Iranian water and power company **Sunir** has signed a memorandum of understanding (MoU) with **Planet Energy** of Pakistan for the construction of a wind farm in Pakistan. Pakistan has been pursuing the development of renewable energy to help plug its power shortages. The two companies will jointly develop a 50MW wind farm in Pakistan with the specific location of the farm being dependent upon land allocations by Pakistan's Alternative Energy Development Board (AEDB).

Transmitting Power

Although the government is said to be considering privatisation, at present Iran’s power sector is controlled by state-owned utility **Tavanir**. Power plant construction is handled by the **Iran Power Development Company** (IPDC), a wholly owned subsidiary of Tavanir. Eventually, Tavanir may be broken up as part of a privatisation package. In addition to power generation, Tavanir is also responsible for electrical transmission. Iran has three main power distribution networks and a government goal is to join these into one national grid. Currently, around 95% of Iran’s rural population has access to electricity.

Iran's three main power distribution networks are: the interconnected network, which serves all of Iran except for remote eastern and southern areas using 440kV and 230kV transmission lines; the Khorasan network, which serves the eastern Khorasan province; and the Sistan and Baluchistan network, which serves the remote south-eastern provinces of Sistan and Baluchistan.

Meanwhile, further extending their energy co-operation, Iran and Russia have signed a letter of intent to accelerate the construction of shared power grids, both between them and regionally, according to a report from the *Iranian News Agency*.

New And Ongoing Energy And Utilities Projects

Power Plants And Transmission Grids

- In August 2009, it was announced that India is assessing plans to build a 6,000MW gas-fired power plant in Iran. This will be connected to India via a 1,500km high-voltage transmission line. The project will allow India to access Iran's gas reserves for electricity generation without participating in the pipeline project. According to the *Hindustan Times*, Indian power company **NTPC Ltd** and Indian transmission company **Power Grid Corporation of India Ltd** (PGCIL) are currently assessing the project, which is estimated to cost US$10bn. The 6,000MW gas-fired power plant would be located in Iran, and the majority of electricity generated, around 5,000MW, would then be exported to India. PGCIL had been asked to assess the financing and technical feasibility of the project and has come up with two options for transmitting the power, according to the company's chairman, S. K. Chaturvedi. The first is an overland transmission line, which will link the two countries via Pakistan. This option is estimated to cost US$4.12bn. The second option is a 1,000km sub-sea connection, thus avoiding Pakistan. However, this option would cost at least twice as much and has therefore been labelled uneconomical.

Power Plants And Transmission Grids	
Q3 2009	▪ In July 2009, Alo Akbar, the head of the Atomic Energy Organisation of Iran (AEOI), announced that no date had been set for the start of operations at the Bushehr nuclear power plant. The power plant began its pre-commissioning stage in February 2009, with commentators expecting operations to commence by the summer. Russia has already delivered the nuclear fuel for the reactor under its US$1bn contract to build the plant. However, as reported by the *Fars News Agency*, the AEOI is continuing inspections of the plant and considering all safety precautions before giving the green light. However, the agency has re-iterated that launching the plant remains its top priority. Work on the 1,000MW light-water reactor originally began 34 years ago.
Q2 2009	▪ In May 2009 it was announced that 500MW of power generated by the Bushehr Power Plant would be added to Iran's national grid by the summer. By 2010, a further 500MW will be generated bringing the total power generation to 1,000MW. Iran has caused much controversy with its determination to build a civilian nuclear capacity and many countries in the international community are convinced that the country is trying for a nuclear weapon. The Bushehr plant is run on Russian fuel, and all activities are carried out under 24-hour surveillance from the International Atomic Energy Agency (IAEA). With Iran suffering frequent power outages the country is planning to build additional nuclear power plants including a 300MW facility in Darkhovevn.
	▪ In early 2009, it was announced that Iran is planning to construct a 1,000MW gas-fired power plant near to the Zahedan, in the South East of the country. According to the *Fars News Agency*, the Iranian government is looking to address the 4,000MW power deficit that currently exists in the country. As part of preparations for the new facility, a 120km transmission line will be built crossing

Power Plants And Transmission Grids

the Iranian and Pakistani border. In 2008, Iran agreed to export 100MW of power for Pakistan's Gwadar Port, as well as 100MW for other areas of the country. The new transmission lines will help facilitate the transfer of these power contracts.

Q1 2009

- In January 2009, according to *Fars News Agency*, Mahmoud Reza Sajjadi, Iran's ambassador to Russia, said that Russia will complete Iran's Bushehr nuclear power plant in 2009. The facility is the country's first nuclear plant and is expected to become operational by March 2010. Russia is helping Iran to construct the Bushehr nuclear power station. A timetable for the construction of the US$1bn plant and the delivery of the nuclear fuel, Uranium-235, has been agreed. When complete, the plant will have a 100MW capacity. Construction of the Bushehr plant was supposed to be complete in 1975, but due to various setbacks has not been finished yet.

- The director of the solar energy division of the Iranian Renewable Energies Organization (IREO) has stated that Iran's first solar power plant was inaugurated in Shiraz on January 10 2009. The plant has a capacity of 250KW energy production that can be extended to 500KW by establishing larger solar panels. This is a giant step towards generating electricity at the nationwide level, according to director of the IREO as cited by *Power Engineering*. BMI notes that the renewable sector is underdeveloped, although the area does have potential to utilise its climate and develop solar power initiatives.

- In January 2009, Iran's President Ahmedinejad discussed helping Kenya to realise its plans for a nuclear power plant during a visit to the country. Kenya has been making noises about plans for a nuclear power plant, and Iran has already displayed a willingness to help African countries achieve nuclear power. According to Africa's *Business Daily*, Kenya's interest in nuclear power first surfaced in September 2008, when *Reuters* reported that Kenya's energy minister, Kiraitu Murungi, had announced plans for a 1,000MW plant at a cost of around US$1bn. The minister had called for both technical and financial assistance with the plans, which would help Kenya become a regional energy exporter.

Q4 2008

- In November 2008, Iran's energy minister, Parviz Fattah, revealed that the government has approved 177 dams. Of these, the government has so far allocated funds for construction of 28 dams. With studies on 19 other dams complete, it is expected that they will receive funding soon.

Water

- In September 2009, the governor of the province of Basra in Iraq, Shaltah Aboud, proposed a new water pipeline from Iran to Iraq, reports *zawya*. He said that water from the river Shatt Al-Arab in the province is neither drinkable nor suitable for agriculture because of high level of salinity and as a result Iraq has to import water from Iran. A new pipeline would ease the transport of water from Iran to Iraq. Inadequate supply of clean

water is a major issue in the province, and therefore the large-scale water project will be beneficial. According to a survey by the Ministry of Health, as cited by the UN's Integrated Regional Information Network, 17% of water in Iraq is not potable. Demand for water looks set to increase as reconstruction in Iraq gets under way following a period of relative stability regarding the security situation. The water line should help the province government to tackle the problem of clean water.

Water	
Q2 2009	▪ In July 2009, Iran announced that foreign firms would be allowed to participate in the construction of waste-water treatment plants in the country. One recent project involves building an INR720bn (US$72.5mn) treatment facility in Shiraz, the capital of Fars Province. Although Iran is considered a developed country in terms of water supply, the new plant will significantly improve the water hygiene in Shiraz, which will in turn benefit the health service.
Q1 2009	▪ In January 2009, the *Fars News Agency* reported that there are a number of renewable energy projects currently being developed between Pakistan and Iran. These include a 130MW hydropower plant at Sehra in Pakistan, which is being set up by Iranian firm M/S Farab.
Q4 2008	▪ In February 2008, Iranian deputy energy minister for water affairs, Rasoul Zargar, announced that IRR32trn (US$3.43mn) had been earmarked for Iran's water sector. The funds are to be used for dam construction, water and wastewater and hydroelectric projects.

Pipelines

- According to the *Fars News Agency* in September 2009, India is once again eager to join a multi-billion-dollar pipeline that would transit gas from Iran via Pakistan. Both India and Pakistan are facing energy shortages and see the 2,700km pipeline as a vital supply route. The gas would be supplied from Iran's South Pars gas field and the pipeline would have an initial capacity of 22bn cu m per year. Although talks over the project have been ongoing for some time, India's interest had waned, leading Pakistan and Iran to threaten to sign a bi-lateral agreement. However, India is now reportedly showing interest once again in the US$7.4bn project and there is the possibility that a deal could be finalised this year. However, this could reduce the need for India to build a major gas-fired power plant in the country. Meanwhile, according to the *Fars News Agency* in October 2010, the Iran-Turkmenistan gas pipeline will be operational in by December 2009. The pipeline is set to deliver 6bn cu m of gas into Iran every year.

Pipelines	
Q3 2009	▪ According to news agency *UPI*, in June Iran said it would be inviting Russian and international companies to submit bids to build an oil pipeline linking the Caspian Sea to the Gulf of Oman. *Ria Novosti* news agency quoted Iranian deputy oil minister, Noureddin Shahnazizadeh, on a visit to

Pipelines

Moscow, saying that his government had concluded initial feasibility studies on the US$2bn pipeline and was preparing to move forward to the contract stage. 'We will soon announce an international tender. I invite international companies, including Russian companies, to participate in the project,' he was quoted as saying. Iran has the capacity to store around 1.5mn barrels of oil at ports on the Caspian Sea which could be pumped onwards through a 1,552km pipeline from the Caspian port of Neka to Jask in the Gulf of Oman. Building the pipeline is part of a five-year development plan set to start in 2010.

Q2 2009

- The Iran-Armenia gas pipeline was officially inaugurated on May 13, marking the start of the countries' 'gas-for-electricity swap' deal, according to Reza Kasaizadeh, head of National Iranian Gas Export Company (NIGEC) quoted by Reuters. Iran and Armenia signed a 20-year contract in 2004, under which Armenia agreed to supply Iran with three kilowatt hours (kwh) of electricity for each cubic metre of natural gas that Armenia receives from Iran. It remains unclear whether gas exports have started. The 140km Iran-Armenia pipeline runs for 100km through Iran, stretching from Tabriz to the Armenian border, with Armenia's 40km section stretching from the Meghri region to Sardarian.

- In May 2009, as reported by the *Fars News Agency*, the Iraq-Iran pipeline – linking Basra to the refinery in Abadan – is to go ahead, with each country responsible for building the pipeline in their respective territories. When completed at least 50% of the oil supplies going to the Abadan refinery will be supplied by Iraq.

Q1 2009

- In March 2009, *Euraisan.net* reported that Russia was hoping to become a transit country for Iranian gas exports to Western Europe. Iran could potentially rival Russia as a gas exporter by 2020 if it manages to triple production as planned. However, there are doubts as to whether Iran will export substantial volumes of gas through Russia. Iran is thought to be considering creating a 'Persian pipeline', which would utilise existing infrastructure and transport gas as far as the Turkish border.

Q4 2008

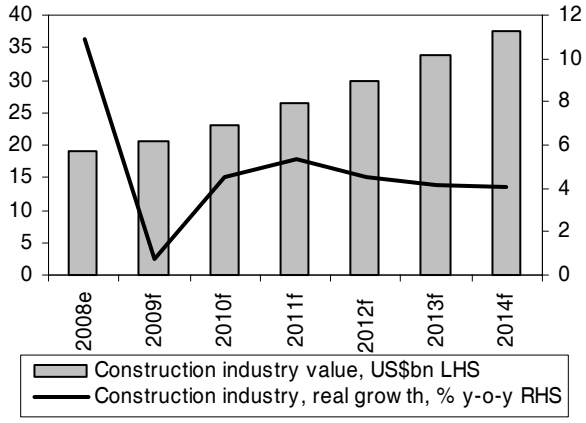
- In December 2008, *Fars News Agency* announced that construction on a pipeline linking Armenia and Iran would begin in 2009. The 300km pipeline will carry petrol and diesel from the Iranian refinery in Tabriz. The project is expected to be completed in 2011.

Construction Overview

The Iranian construction industry could potentially benefit from the nation's wealth in natural resources and its geographical location. It boasts strong reserves of iron ore, non-metallic minerals (including copper, zinc and bauxite) and decorative stones such as marble and granite.

Building Up

Iranian Construction Industry Value And Real Growth



e/f = BMI estimate/ forecast. Source: ILO, UNCTAD, OEF, Bank Markasi, IMF, BMI

However, the Iranian construction industry is forecast to grow by just under 1% in real terms in 2009 as a result of the economic crisis, after growing by almost 11% in 2008. However, if international sanctions intensify over Iran's controversial nuclear programme, the country may begin investing even more resources in constructing a domestic oil refining industry. In December 2008, the country announced that it would be building seven new refineries at a cost of US$27bn by 2013. This programme is becoming even more vital with the international community threatening to penalise companies that sell gasoline to Iran. According to *Bloomberg* in October 20009, Iran is planning to sell US$55mn in bonds in order to help finance its refinery projects. Lack of proper housing is a great concern for a large section of the population, which is already battered by high inflation and unemployment. Iran needs at least 5mn new housing units. Industry analysts believe that modern technologies can help accelerate construction work and improve safety standards. Presently, inflated land prices account for half the construction costs, and builders are unwilling to invest money in modern technologies.

Owing to a lack of supply, housing prices are high, which has meant that many low-income families cannot afford them. According to the *Tehran Times,* the national demand for housing in Iran in around 1.5mn per year, while construction levels are approximately half of this total. According to the Minister for Housing and Urban Development, approximately 70% of Iranians own their homes, while just over 20% rent them. Around 7-8% of the population live in government housing units. In August 2008, Iran and the Malaysian company **Neguin Group** launched a joint-venture housing project in the Ekbatan township. The project is estimated to cost US$400mn.

In March 2009, Iran began construction on a military facility that will produce Unmanned Arial Vehicles. The plant will be located in the province of Mandaran and is being constructed by **Farnas Aerospace Company**, which specialises in stealth reconnaissance aircraft.

In May 2009, according to the *Tehran Times*, Iran's construction sector received a boost from the news that the second phase of the Shahroud Cement Factory became operational. This has raised capacity at the plant to 6,000 tonnes per day, from a previous figure of 2,700 tonnes. Iran is now self-sufficient in cement production and actually produces a surplus for export. By 2013, it is expected that cement production will reach 110mn tonnes per year.

In June 2009, Iran and Iraq signed a memorandum of understanding (MoU) regarding housing and road construction. Under the agreement, Iran's housing ministry is to build four roads in Iraq, as well as 600 housing units. Iran will also partially finance the projects through a US$1bn loan. Iran is becoming an important actor in the reconstruction of its neighbour and has also been negotiating with Iraq in recent months regarding the construction of five oil refineries in the country.

Table: Iran--Major Infrastructure Projects

Project	Project value, US$mn	Company name(s)	Timeframe	Status
Airport construction				
Renovation and expansion to Esfahan's Matyr Behesti Airport	6	na	-2010	Plans in place to increase airport passenger capacity to 9mn by 2010
Khoy airport upgrades	4	na	na	Project announced
Port construction				
Storage and port facilities, South Pars (phase 12)	500	NIOC	na	Contract signed
Development of Chabahar Port	340	Khatam al-Anbia Reconstruction Base	To be completed in three years	Contract signed
Construction of the port of Pars located in Bushehr	300	na	na	Currently under way
Road construction				
Tehran-Shomal Freeway	na	na	-2010	Contract agreed
Persian Gulf bridge project	1000	na	na	Project announced
Railway construction				
Iran-Azerbaijan Railway	na	Joint company between Iran, Russia and Azerbaijan	2009-	MoU signed
Iran-Iraq railway	na	na	na	Khorramshahr-Shalamcheh section to be completed by January 2009
Iran-Turkmenistand-Kazakhstan	650	na	2009+	Planning stage
North-South transport corridor	400	na	2009+	Planning stage
Tehran monorail	na	na	2008+	Bidders short listed
Electrification of Tebriz-Azarshahr railway	na	Russian Railways	2008-2009	Project awarded
Iran, Russia and Azerbaijan railway	na	na	2008+	Governmental agreement to proceed
Chabhar Port to Fahraj Railway	na	Indian Railways	2008+	Project awarded
Iran-Armenia rail link connection	1,500-2,000	na	To be completed in five years	Project announced
Iran-Kazakhstan-Turkmenistan railway	1,000	na	2007+	Russian Railways has announced interest in the

Table: Iran--Major Infrastructure Projects

Project	Project value, US$mn	Company name(s)	Timeframe	Status
link:.North-South Railway				project. Link though Abkhazia could stall project.
Regional rail network across Iran	63	na	na	Construction of first phase under way
Bam-Zahedan railway line	291	na	-2008	70% complete
Oil and gas pipelines and petrochemicals				
Iran-Armenia fuel pipeline	n/a	n/a	2009	Project inaugurated
Iraq-Iran pipeline from Basra to Abadan	na	na	2009+	Project announced
Nabucco Gas Pipeline	5,500	RWE, Botas, Bulgargaz, Transgaz, MOL, OMV Gas	-2012	RWE joined as sixth partner. Deadline set back from 2010 to 2012
Iran-Pakistan-India Pipeline	7,400	GAIL	2005-2014	Iran has given India a deadline of 2008 to join the project.
Fertiliser Plant in Assaluyeh	na	Petrochemical Investment Company, PT Pupuk Sriwijaya	2007+	Joint venture announced
LNG production, South Pars (phases 13 and 14)	4,300	Shell, Repsol	na	Preliminary deal signed
South Pars phases 17-18 development project	2,050	Petropars, Iran Offshore Engineering and Construction	2005-2009	Currently under way
South Pars phases nine-10 development project	1,800	GS E&C; OIEC; Iranian Offshore Engineering and Construction Co	2005- 009	Pipelaying for phase nine complete
Phenol-acetone plant, Assaluyeh	250	Parsphenol	2007-2010	Feasibility study has been completed
Forouzan-Esfandiar oilfields reconstruction	400	Pedco,IOEC	na	Project announced
Oil refineries				
Construction of seven oil refineries	27,000	National Iranian Oil Refining & Distribution Company	2008-	Project at planning stage, investors being sought
Expansion of Shazand refinery, Arak	2,600	Sinopec and Oil Design & Construction Co (ODCC), Europower	2006-2009	Project announced
Refinery at Bandar Abbas	2,000	Essar Group, NIORDC	na	At planning stage
Upgrade the refinery in the Esfahan region	1,800	Daelim Industrial, Uhde, Lurgi	2007-2011	Contract awarded

Table: Iran--Major Infrastructure Projects

Project	Project value, US$mn	Company name(s)	Timeframe	Status
Power plants				
6,000MW gas-fired power plant	10,000	NTPC, Power Grid Corporation of India	2009+	Planning stage
177 dams	na	na	2008+	Projects approved
1,000MW gas-fired power plant near to the Zahedan	na	na	2009+	Project announced
Eight 6,000MW electricity power plants in Khuzestan	na	na	2008+	Project announced
Eight power stations in Khuzestan Province	na	na	2008+	Project announced.
Bushehr Nuclear Power Plant	1,000	Atomstroiexpert	1995-2009	Tests successfully completed
Iran-Russia electricity grid link	na	na	2008+	Letter of intent signed. RAO UES seeking the project
19 new nuclear power plants	na	na	2007+	Project announced. Tenders to be invited
Cycle Power Plant in Heris	na	Tavanir, Zenel Company	2008-2010	Joint agreement signed
Iran-Turkey Transmission Line	1,500	na	na	Memorandum signed
Rudbar-e-Lorestan hydropower project	9.52	Pöyry	na	At planning stage
Shiraz Solar Power Plant	n/a	n/a	2009	Plant has been inaugurated
Water infrastructure				
Dam construction, water and water waste schemes and hydro electric projects	3,430	na	2008+	Funds have been earmarked by the government.
Bakhtiari dam on river Dez	1,000	na	na	At funding stage
Residential and commercial construction				
Housing project in the Ekbatan township	400	Neguin Group	na	Project announced
Residential units in satellite towns of Parand and Hashtgerd	500	Amona Company	2006-2010	Currently under way
Car manufacturing plant , Babol	340	Solitac	na	na
Chery Automobile	na	na	na	na
Iran Khodro	na	na	na	Project announced

Table: Iran--Major Infrastructure Projects

Project	Project value, US$mn	Company name(s)	Timeframe	Status
Industrial construction				
Military facility for stealth surveillance aircraft	na	Farna Aerospace Company	2009-	Project announced
Steel plant in Hormozgan	450	IRITEC	2006-2009	Project announced
Construction of steel plant in Khorramshahr	300 (first phase)	na	First phase to be completed by 2010	At construction stage
Hotel and resort construction				
Flower of the East Resort, Kish island	2,160	Flower of the East Development Co, Dress and Sommer	2006-2009	Currently under way

na = not available. Source: BMI

Industry Forecast Scenario

Table: Construction And Industry Data

	2007	2008e	2009f	2010f	2011f	2012f	2013f	2014f
Construction industry value, IRRbn	131,470	179,262	202,101	237,504	278,807	325,002	377,552	434,466
Construction industry value, US$bn	14.25	19.01	20.61	23.17	26.40	29.88	33.70	37.65
Construction industry, real growth, % y-o-y	30.34	10.87	0.74	4.52	5.39	4.57	4.17	4.07
Construction industry, % of GDP	4.95	5.40	5.95	6.03	6.10	6.17	6.28	6.37
Total capital investment, IRRbn	683,850	903,272	1011664	1179680	1375696	1594931	1844324	2114425
Total capital investment, US$bn	73.74	95.80	103.17	115.07	130.28	146.65	164.64	183.25
Total capital investment, % of GDP	25.76	27.20	29.80	29.94	30.11	30.29	30.66	31.00
Capital investment per capita, US$	1,036	1,327	1,410	1,551	1,733	1,924	2,131	2,341
Real capital investment growth, % y-o-y	6.00	6.60	0.00	3.61	4.62	3.94	3.64	3.64
Government capital investment, IRRbn	147,716	180,330	204,396	218,836	234,719	252,191	271,410	292,551
Government capital investment, US$bn	15.93	19.13	20.85	21.35	22.23	23.19	24.23	25.35
Government capital investment, % of total spending	25.96	54.31	60.21	55.54	51.37	47.89	45.12	42.89

e/f = BMI estimate/forecasts. Sources: ILO, UNCTAD, OEF, Bank Markasi, IMF.

Although **BMI** expects Iran's construction to continue to expand over the forecast period, pessimism over the country's macroeconomic indicators have caused us to decrease our forecasts for the construction sector in the short-term.

In 2009, we expect the sector to expand by 0.74% in real terms to reach US$20.61bn, down from the almost 11% growth seen in 2008. **BMI** forecasts a FY2009/10 growth forecast of 1.4% for the economy as a whole, as the global economic crisis puts the brakes on Iran's recent rapid expansion. Oil prices may

have been trending up for the whole of this Iranian year (so far), but turning the economy around will take some time. While the economy continues to expand at these low rates, **BMI** does expect the construction sector to return to pre-crisis growth levels. By 2014, we expect the sector to reach a value of US$37.65bn, after posting a compound annual growth rate (CAGR) of just under 4% in real terms between 2009 and 2014. This compares with a CAGR of 12.8% between 2004 and 2008.

Inflation is also continuing to cause a serious problem, eroding gains in the construction section and the consumer price index is forecast to average 13.6% between 2008 and 2013. In his first term in office President Ahmadinejad increased government spending on infrastructure projects by 62% according to government officials. Yet it is unlikely that such a spending spree can be maintained.

Iran's fiscal outlook is grim. The rally in oil prices over the course of H109 has certainly helped, considering that oil revenues contribute over half of the central government's total fiscal revenues. Nonetheless, Tehran will find it nigh on impossible to escape from its fiscal hole over the next five years (at least). We are projecting a fiscal deficit of US$35.4bn (10.9% of GDP) in FY2009/2010 (note: Iranian years begin in March). Moreover, we see similarly sized shortfalls (in nominal terms, though falling as a percentage of GDP) out to FY2013/2014. This is bound to impact major public sector projects and so we are expecting a slowdown in infrastructure investment.

Still, the construction industry still has a number of positive factors that are driving growth. Firstly, there remains a severe shortage of housing stock in the country, with the *Tehran Times* claiming that demand stands at around 1.5mn housing units per year, while only around 700,000 are completed each year. Also the population is growing rapidly and will increase by almost 10mn between 2008 and 2018. This will place pressure on the country’s infrastructure and will force the government to invest substantially in areas such as housing, health and power. Iran is already planning a number of large-scale projects in its energy sector.

Business Environment

Middle East Infrastructure Business Environment Ratings

This quarter the Middle East Business Environment Ratings take into account one less country, Turkey, which has been removed in order to align with **BMI**'s geographical breakdown, whereby Turkey is now firmly placed in Europe.

Without Turkey, Yemen's poor scores stand out as even more of an anomaly among the Middle Eastern countries assessed in our business environment ratings. Yemen scores almost 15 points lower than penultimate-ranked Egypt this quarter.

Despite this, the region's scores have become more homogenised this quarter, with the majority of countries losing points compared with last quarter. This reduction in scores is related most directly to the extension of our forecasts for the construction industry value to 2014 which have revealed a steady downward trend over the forecast period from the peak expected in most countries in 2010 and 2011.

As such, although scores have been reduced for the infrastructure market indicator for many countries, this is not, for most countries at least, related to short-term risks, which in fact have improved in some countries. Therefore risks are firmly to the upside for this indicator.

Regional Overview

The Middle East is defined for the most part by its oil and gas industry, with the majority of the economies in the region dependent upon revenues from the sector. With the price of oil having declined substantially over the past year from exorbitant highs in early 2008 following global demand destruction for the commodity, oil revenues have declined significantly, thus limiting the ability of the governments in the region to re-invest surplus revenues in major infrastructure works. Though most governments have pledged to continue with their planned investments in infrastructure and indeed increase the budget allocations for such investments, they will be doing so from a less comfortable position as far as availability of funds is concerned.

As the economies in the Middle East begin to stabilise, we are beginning to get a better picture of which countries will be able to sustain infrastructure investments, and which will not. With this in mind, the scores for the infrastructure market have changed in light of short-term adjustments to the infrastructure score. Oman has possibly benefitted the most from this, as it is now forecast to have one of the best growth pictures in 2009 and now has the second highest score in the region for infrastructure market behind Qatar, which despite losing points, still has the most promising infrastructure investment picture.

Regional integration in the Middle East is quite strong, with the Gulf Cooperation Council (GCC) linking the UAE, Qatar, Oman, Saudi Arabia, Kuwait and Bahrain. The GCC is primarily a trade bloc, with a unified economic agreement between the countries, and plans for a joint currency. The other common characteristic of the region – though certainly not restricted to the GCC states – is the regime structure, all based around the royal families of the countries, which bodes well in terms of policy continuity, so long as their rule remains unchallenged.

Regional Transport overview

Transport infrastructure in the region is heavily reliant on roads. Rail is a fairly new addition to the modal mixture, and many countries still do not have any rail network to speak of. As a result, investment has traditionally been in the road sector. However, rail is now receiving attention with plans under way to develop the rail sector regionally and opportunities for international players to get involved.

This development of rail will predominantly take place through the proposed GCC pan-Gulf rail network. The 1,940km rail link will connect the six GCC states, and possibly in the future Yemen. The cost estimates for the project have increased significantly since last quarter and the anticipated date of operation has been pushed back. The project is now estimated to cost between US$20bn and US$25bn, with trains not due to come online until 2017.

With only Saudi Arabia having a rail system, the construction of rail networks within the member countries is an important pre-condition of the project. Therefore, individually, countries are also stepping up investments in rail. Saudi Arabia is perhaps taking rail investments most seriously, with three major rail projects under way in the country: the North-South; the Landbridge, which goes from east to west; and the Haramain (Mecca-Jeddah-Medina) high-speed rail link. Contracts have been awarded for these projects, with international companies benefitting heavily.

Bahrain and Qatar are progressing with their Friendship Bridge, which will now include rail lines as well as road lanes. The project, which will be the world's longest marine causeway, has been subject to multiple delays, despite contracts already having been awarded, due to technical and financial issues. However, it is reportedly back on track now, with negotiations due to be finalised by the end of 2009 and work due to start in 2010. The project is estimated to take five years to complete.

Regional Energy And Utilities Overview

With vast reserves of oil and gas, the region's power sector is well established. During 2008 a total of 738.6TWh of electricity was generated in the Middle East, according to the *BP Statistical Review*. The largest power producers in the region are Saudi Arabia (26% of the total) and Iran (28%). Unsurprisingly,

the main source for electricity generation is gas, with oil also featuring prominently. The renewables sector is in its infancy in the region, although there is vast potential for solar power. As **BMI** anticipated last quarter, the industry has been growing over recent months.

Coal and nuclear are likely to be elements of the future power mix in the region. Coal-fired power plants are being considered by a number of Gulf countries in order to meet growing demand for electricity quickly and economically. This is a commercially viable option, as the countries can export the more lucrative oil and gas and buy cheaper coal. Ajman, in the UAE, is likely to have the first coal-fired power plant in the region. The emirate signed a US$2bn contract with Malaysia's **MMC** in July 2008 for a 1,000MW power plant, which is due to be completed in 2012. Ras Al Khaimah is also in contention for the first coal power plant, announcing in March 2009 that it was planning to build a power plant that would be completed in two years' time. Oman is also developing its first coal-fired power plant, the Duqm independent water and power plant (IWPP), which made progress in September 2009 with the signing of the technical and financial advisory contracts. The IWPP is due to be completed in 2015.

Nuclear power is being pursued by a number of countries in the region. Of those we assess, Iran, Egypt, Kuwait, Qatar, Saudi Arabia and the UAE are all looking at the possibility of nuclear power. Jordan is also making progress on the nuclear front, although it is not a country we cover in the business environment ratings.

Iran's Bushehr nuclear power plant has been completed and is undergoing final testing; it is due to come online late 2009 or early 2010. Egypt signed a nuclear consultancy contract with **WorleyParsons** in June 2009 to develop its own nuclear power plant. In the rest of the region, France has been a major element in the GCC countries' plans for nuclear, as it has signed agreements with the UAE and Qatar and is in talks with Saudi Arabia and Kuwait. The UAE is likely to be the first country in the region to start work on a nuclear power plant, with plans for a US$40bn nuclear power plant currently being tendered. The tender, however, has been subject to a lot of controversy and confusion, with little progress reported.

Regional co-operation is also evident in the distribution and transmission sector, where the GCC countries are working to establish regional links in the power sector. This involves the GCC electricity grid, estimated to cost US$1.2bn, which will allow the transfer of electricity across the GCC states in order to divert excess supply and maximise efficiency. The GCC South Grid, connecting the UAE and Oman, has already been completed as a side project, and the first phase of the project, GCC North Grid, originally due to be completed by the end of 2008, was completed in July 2009. This phase included connecting the grids of Kuwait, Saudi Arabia and Qatar via subsea cables. The final phase will connect both the north and south grids and is due to be completed in 2011.

Oil and gas pipelines also feature heavily in the region's infrastructure plans, with large-scale investments planned. One of the largest projects currently at the planning stage is the construction of the MedStream

pipeline between Turkey and Israel, which will carry not only oil and gas, but also water and optical fibres.

The supply of water is a growing issue in the region, with reports that the Middle East and North Africa region will likely face severe water shortages in the coming years. The region has only 1% of the world's ground-water resources but contains 5% of the world's population. As a result, the development of desalination plants in the region has been a major element of the increase in infrastructure investment over the past couple of years. The majority of these are combined with power plants and are tendered out to private companies as IWPPs. The growing number of IWPPs in the region is presenting numerous opportunities for international majors to get involved.

Credit illiquidity and risk aversion, however, are presenting an obstacle for some projects. Saudi Arabia's Ras al Zour IWPP was taken under government control as the companies contracted to take it on encountered issues with financing, and a new tender for the project to be executed as an EPC is in the pipeline. On the other hand, the financing for the Shuweihat 2 IWPP in Abu Dhabi is currently being finalised, and once complete it will become the largest IWPP deal secured in the gulf in 2009, overtaking Bahrain's Al Dur IWPP, which successfully raised financing in July 2009.

Middle East Business Environment Ratings Overview, October 2009

The ratings have changed this quarter. For some countries this change has been quite substantial and as a result the rankings have moved around. Although there has been a shuffling about of individual countries, the general trends have stayed the same, with the GCC countries taking the top spots and Yemen firmly in last place.

With the extension of our projections to 2014, the average growth for the construction industry over our forecast period has been reduced (due to milder growth trends expected in the latter years of our forecasts), meaning that the vast majority of countries have lost points in the infrastructure market and therefore lost points overall. However, as this effect is in place across the board, it has not corrupted or distorted our rankings.

Qatar remains in the top spot this quarter, although due solely to the above reasons its score has fallen to 64.5 out of 100 from 68 previously. Despite this adjustment, the country still represents the most dynamic infrastructure market in the region, with a score of 65 out of 100. Despite the industry's small size, the level of capital investment as a percentage of GDP is substantial and drives high levels of investment in infrastructure. This strength outweighs less impressive scores for risks to realisation of returns, where other lower-ranking GCC countries perform better.

Oman has moved up to second place this quarter. This is due to an increase in our short-term outlook for the country's infrastructure sector, which is offsetting most of the downward pressure of the latter growth trends. Infrastructure investment in Oman has been stepped up over the last few quarters, prompting an upward revision in our short-term forecasts for sector growth and potential. Oman's second place is also a result of it posting the highest score for risks to realisation of returns, meaning the country presents the lowest level of risk to investors in the Middle East. Policy continuity is high, there are low levels of corruption and political risk, and a transparent and competitive tendering process all of which amount to a safe business environment.

Last quarter's second-placed country, Saudi Arabia, has been pushed down to number three this quarter. Our short-term forecasts for the country have improved in light of the government's commitment to upholding infrastructure investment. However, the decline that the model formulates over the long term undermines these improvements, and as such risks are to the upside for the country.

Bahrain has gained a number of places this quarter, bringing all GCC countries into the top six. Bahrain's infrastructure market has seen significant gains this quarter, albeit from the lowest base previously, with government spending as a percentage of GDP driving potential in the market. Bahrain now has one of the better scores for limits to potential returns in the region (54 out of 100), fuelling its rise in the rankings to fourth place from eighth place previously.

The UAE has been pushed down one place to fifth, with a score of 59.5. While the UAE has one of the most transparent and competitive tendering processes in the region, activity in the construction sector has been one of the most dampened by the downturn. For this reason, although the country presents few risks, there are noteworthy limits for investment potential.

Kuwait posts the lowest score of all the GCC countries – 56.8 out of 100 – owing to a less transparent and competitive infrastructure sector, which outweighs limited country risks.

The difference between the lowest scoring GCC country and the highest scoring non-GCC country is not substantial, with seventh-placed Iran coming just under two points below Kuwait with a score of 55. Iran's scores are pretty average across the board; perhaps its weakest point is its opaque tendering process and the lack of companies present in the country. The potential for infrastructure investment is a more promising element of the country's business environment.

Israel, Egypt and Yemen make up the bottom three places from eighth to 10th respectively. All three only achieve scores in the 30s for infrastructure market, showing limited potential for investors, which is evident over both the short term and longer term growth trajectory. Israel's far superior country structure, which is one of the highest scoring in the region, as well as its limited levels of risk, are undermined by the poorest score in the region for infrastructure growth.

In the same way, Egypt's limited market risks are undermined by middling scores for country risks and low scores for limits to returns.

Yemen remains at the bottom of the table, and its reduced score of 35.9 cements its position there. The country is the only one scoring in the 30s in the region, and it is responsible for the only score in the 20s across the table – 27 – for its country structure. Yemen's country structure is vastly inferior, having a very poor financial infrastructure. Potential for the infrastructure market shows some of the most limited opportunities in the region. Risks are also high: the legal framework and economic structure are deficient and corruption is rife, underscoring Yemen's position at the bottom of the table.

Table: Middle East Infrastructure Business Environment Ratings

	Limits of Potential Returns			Risks to realisation of returns				
	Infrastructure Market	Country Structure	Limits	Market Risks	Country Risk	Risks	Infrastructure BE Rating	Regional Ranking
Qatar	65.0	54.8	61.4	75.0	69.3	71.6	64.5	1
Oman	57.5	60.8	58.7	82.5	70.9	75.6	63.7	2
Saudi Arabia	52.5	67.2	57.7	75.0	62.9	67.7	60.7	3
Bahrain	45.0	70.6	54.0	77.5	73.1	74.9	60.2	4
UAE	50.0	59.7	53.4	80.0	69.5	73.7	59.5	5
Kuwait	40.0	78.6	53.5	57.5	68.9	64.3	56.8	6
Iran	**55.0**	**56.5**	**55.5**	**45.0**	**59.8**	**53.9**	**55.0**	**7**
Israel	32.5	73.1	46.7	75.0	72.4	73.4	54.7	8
Egypt	37.5	57.8	44.6	70.0	56.6	62.0	49.8	9
Yemen	37.5	27.0	33.8	37.5	43.1	40.9	35.9	10

Source: BMI. Scores out of 100, with 100 highest. The Infrastructure BE Rating is the principal rating. It comprises two sub-ratings 'Limits of Potential Returns' and 'Risks to realisation of returns', which have a 70% and 30% weighting respectively. In turn, the 'Limits' Rating comprises Infrastructure Market and Country Structure, which have a 65% and 35% weighting respectively and are based upon growth/size of the Infrastructure industry (Market) and the broader economic/socio-demographic environment (Country). The 'Risks' rating comprises Market Risks and Country Risk which have a 40% and 60% weighting respectively and are based on a subjective evaluation of industry regulatory and competitive issues (Market) and the industry's broader Country Risk exposure (Country), which is based on BMI's proprietary Country Risk Ratings. The ratings structure is aligned across the 14 Industries for which BMI provides Business Environment Ratings methodology, and is designed to enable clients to consider each rating individually or as a composite, which the choice depending on their exposure to the industry in each particular state. For a list of the data/indicators used, please consult the separate methodology booklet.

Limits Of Potential Returns

Infrastructure Market

BMI has downgraded Iran's score for the infrastructure sector as the deep economic crisis has resulted in a sharp drop in growth rates in the construction sector. With the economy only expected to post modest growth over the forecast period, coupled with the threat of further international sanctions, **BMI** does not expect the construction sector to recover to pre-crisis growth levels before 2014. In terms of value, the Iranian construction industry figures rather low among its peers owing to its poor economy and relatively inexperienced construction companies. However, opportunities in the form of housing demand and larger capital inflows to take advantage of Iran's untapped construction potential are indicative of good y-o-y growth.

Country Structure

Iran's scores rather modestly in terms of its labour market. It has been observed that stringent local labour laws have prompted its labour population to seek employment abroad. This exodus has been a major problem for the construction sector, resulting in delayed projects. The country also suffers because of a poorly structured financial system creating a hurdle in accessing capital. Meanwhile, the threat of new international sanctions as a result of its nuclear ambitions is likely to have a further negative impact on the market. Iran is now threatened with the possibility of restrictions on gasoline imports. This would limit Tehran's ability to finance populist measures, such as investment in area such as infrastructure.

Risks To The Realisation Of Potential Returns

Market Risks

This score was downgraded by **BMI** in Q109 to 45 as a result of growing international pressure due to the country's controversial nuclear programme, which is discouraging investment. The business environment in Iran is also constrained by government reluctance to allow substantial foreign investment into the country. The Foreign Investment Promotion and Protection Action (FIPPA) has improved regulations surrounding foreign investment; however, the level of investment still remains capped in most instances, and Iranian companies still need to hold the majority stake in most ventures**.** Iran's tendering process is relatively transparent. In 2010, meanwhile, FDI will reach US$1bn. Considering the size of the country these figures are quite small and will have to grow significantly, if Iran is to make head way with its privatisation plans.

Project Finance Ratings: Outlook For Middle East

This quarter we have revised the PFR methodology in an effort to provide a more comprehensive overall score from the interplay of the different indicators used to yield the final results. We have added a new indicator to the first section of our PFR: the design, engineering and construction phase. This indicator assesses the legal framework for public private partnerships (PPPs) or concessions. This indicator adds to our project finance ratings an intrinsic aspect of the risks to project finance in the initial stages, as the transparency of the tendering process and the legal framework surrounding the PPP process is crucial to securing project financing. In the event that a country does not have a PPP framework in place, we will use a default legal framework score; however, if that country intends to use PPPs but does not have a clear legal framework in place, this will negatively affect its score in this section.

BMI's Project Finance Rating (PFR) provides a globally comparative, numerically based assessment of the risks facing the projected cash flows of major infrastructure projects in the energy and utilities, transport, and commercial construction sectors. Specifically, it evaluates the degree of uncertainty facing projects that are generally characterised by the following: long construction period, high construction costs, difficulty in redeploying project assets (e.g. power station) to other uses, earnings generated only after construction completed over a long period of time.

BMI's PFR is best used for evaluating the breadth and depth of risks a major infrastructure project may face during its lifecycle, which will in turn affect the source, availability and cost of finance. Thus, in the current environment, characterised by a limited pool of financial resources and growing demand from competing projects coming to market, the PFR provides a leading indicator for the cost of financing major projects and the pace at which infrastructure development will occur in each state.

We have created two different tables aiming to better identify, analyse and assess broad categories of risks that sponsors and/or companies may encounter during the project's lifecycle. The two tables are composed – very broadly – first of the design, engineering and construction phase, and second of the commissioning and operation phase. The two final scores for each country are then combined to yield the overall project finance rating.

Finally, we have removed Turkey from our Middle East Project Finances in order to align with **BMI**'s geographical breakdown, whereby Turkey is firmly now placed in Europe.

Design And Construction Phase

The design and construction table encompasses indicators such as inflation and long-term currency volatility (henceforth referred to as inputs), which at this stage primarily affect the cost of raw materials.

Additionally, it includes legal and regulatory risks that the company or sponsors may encounter and that can delay commencement of construction and pose regulatory (red tape) obstacles. Closely related to the legal and regulatory risks are the risk factors within the wider political framework, encompassing political risk indicators such as the level to which the rule of law is enforced and respected, internal and external security threats, and the long-term policy continuity and consistency of government policies over the years. Last but not least is the financial risk component, composed of domestic economic stability and the international availability of finance.

There has been little change in this section of the PFR table for the Middle East, with rankings remaining mostly the same, except for the shifting upward of Qatar (from sixth to fourth place) and the moving downward of Yemen (from eighth to ninth place).

Qatar's design and construction rating has increased from 60.8 to 62.1. This increase is related to a significantly improved score for inputs, for which it has gained more than 10 points, outweighing a dampening of the legal and regulatory risks, owing to poor contract enforceability.

Yemen's score, on the other hand, has fallen from 47.4 to 44. Although scores have fallen across the range of factors that affect project finance, inputs appear to be the main drag on Yemen's score, due to high levels of inflation.

The rest of the table remains much the same. For the sake of our analysis we can distinguish two clear groups in this section: those that score more than 60 points, and those that score fewer than 60 points; indeed no countries score in the 50s, making the difference in scores between seventh and eighth place more than 10 points.

At the top of the table, achieving the highest score of 68.7, is Bahrain, whose overall score is boosted by a perfect score in the inputs sub-rating. While it remains the top scorer, it has lost some points since last quarter due to the new PPP/legal framework score, for which it only posts a average score. Also in this top band are all of the Gulf Co-operation Council (GCC) countries as well as Israel, whose legal and regulatory framework score is the highest of all the countries due in part to a high score for the new PPP/legal framework indicator. Conversely, Israel posts the lowest score for inputs in this bracket, mainly because of the shekel's volatility ratings, which are among the worst in the region.

In the second bracket we find Egypt, Yemen and Iran. The scores for these three countries are substantially lower than the scores for those in the first bracket across the board. Most noticeable is the inputs section, where Iran, which places bottom in this section, scores just 28 out of 100 owing to very high inflation, undermining any benefit of relatively limited currency volatility.

Table: Design And Construction Rating

	Inputs	Legal/ Regulatory Risks	Political Environment and Security Risk	Economic/ Financial Risks	Total
Bahrain	100.0	59.0	67.7	57.1	68.7
Oman	78.4	56.8	72.3	56.0	64.7
UAE	68.8	59.9	71.3	57.0	63.5
Qatar	64.0	60.9	71.5	55.0	62.1
Kuwait	66.4	60.6	67.3	55.7	61.7
Saudi Arabia	83.2	47.1	62.1	56.7	61.4
Israel	60.0	61.6	70.0	56.0	61.4
Egypt	44.0	38.1	57.2	51.9	48.9
Yemen	38.0	40.5	46.6	47.7	44.0
Iran	**28.0**	**47.2**	**42.0**	**50.2**	**43.1**

Source: BMI

Commissioning And Operating Phase

The table that identifies potential factors that influence the levels of risk during the commissioning and operation of a project has been broken down into three categories: transport, energy and utilities, and commercial construction. The aim is to reflect the different levels of risk a power plant has from a toll road or a stadium for instance during the operational phase of the project's lifecycle. The aim was to add a degree of separation between sub-sectors in infrastructure, and although the sub-categories in the table are similar for all three sectors, the scores are different for each country in each sector, which allows us to gauge the different levels of potential risk and the potential breadth of the financial impact they may have.

The picture at this stage is largely the same with the six GCC countries placing in the top six positions; however, there are some noticeable differences.

Saudi Arabia, which only placed sixth in the design and construction phase scores much higher here, moving up to third place overall. The country's higher score for inputs is matched in this phase by a more similar score for outputs, due to strong policy continuity and rule of law making for a more reliable operating environment.

Another country that performs better at this stage is Egypt, and although it remains in eighth place overall, there is no difference here between it and seventh-placed Israel. Egypt's score has improved in

this indicator compared with last quarter by almost five points, owing to improved scores across the board, much better reflecting Egypt's market.

Iran and Yemen are once again at the bottom of the table and post the only overall scores below 50 in this section.

Table: Commissioning And Operating Rating

	Commercial/Business Construction			Energy and Utilities			Transport		
	Inputs	Outputs	Total	Inputs	Outputs	Total	Inputs	Outputs	Total
Saudi Arabia	86.6	60.1	68.0	89.1	60.1	68.8	88.8	60.1	68.7
Bahrain	80.0	61.1	66.8	97.5	62.8	73.2	100.0	61.6	73.2
Oman	69.2	64.0	65.6	86.7	64.6	71.2	85.6	64.6	70.9
Qatar	67.0	61.7	63.3	79.5	60.6	66.3	76.0	59.4	64.4
UAE	64.4	60.8	61.9	81.9	60.8	67.1	79.2	60.8	66.3
Kuwait	53.2	57.2	56.0	73.2	57.2	62.0	67.6	57.2	60.3
Egypt	64.5	46.1	51.6	64.5	46.1	51.6	56.0	44.9	48.2
Iran	**56.5**	**48.9**	**51.2**	**54.0**	**48.9**	**50.4**	**42.0**	**48.9**	**46.8**
Israel	45.0	49.2	47.9	60.0	50.3	53.2	50.0	50.3	50.2
Yemen	44.0	46.7	45.9	61.5	48.4	52.3	52.0	47.8	49.1

Source: BMI

Overall Project Finance Rating

Combining the scores of the two tables we have distilled the overall project finance rating, which thus takes into account all of the above sectors and sub-categories.

For the six GCC states, safety lies in numbers, and we once again find them occupying the top six positions at the table validating our previous expectations that even after future revisions to our ratings the GCC states would continue to top be on top of the table. The counties of the Gulf Cooperation Council mitigate risks to investors in infrastructure throughout a project's lifecycle through their peg to the US dollar and a politically stable environment that promises policy continuity for the foreseeable future, as the grip of the ruling families on power does not seem likely to abate.

What is more, the GCC common market, inaugurated in January 2008, is a strong foundation and safety net for all six states, facilitating flows of capital and people throughout the region and creating a relatively

level playing field for investors. We believe that by belonging to this wider framework of the GCC common market, and eventually adopting a common currency (without Oman, which decided to opt out from the scheme), the states will have an advantage in terms of reduced risks to project financing operations in the future.

Israel follows the six GCC states. Israel's infrastructure investments have heavily relied on the private sector participation as a source of funding. Israel certainly holds an advantage, as the country has a highly sophisticated banking and financial sector, which facilitates project financing operations. For this reason, the design, finance, build and operate model has been gaining ground as a means to implement large-scale infrastructure projects, which sets a strong precedent for the country and for the project finance of the infrastructure industry. This feeds into our new indicator for PPP framework, as the country has experience executing this type of project, and therefore has the appropriate measures in place, and as such posts on of the higher scores in the region of 6.3 out of 10.

The sole change in the table is the position of Egypt, which has jumped ahead of Yemen and Iran. This change better reflects the project finance environment in Egypt, which is far more stable and developed than that of either Iran or Yemen. Egypt's noticeably better political environment and inputs score have prompted this revision, reflected in an increased score for the quarter from 46.5 to 49.7.

Yemen and Iran place ninth and 10th respectively. The countries have scored lowest in each section, reflecting the challenging project finance environment. Yemen's low score - 46.6 - is due to high levels of corruption, poor rule of law as well as high levels of inflation and high levels of price risk in the operating phase of projects. Iran's final score of 46.3 is attributable to high inflation, poor market orientation and, in the operating phase, a high level of risk for both demand and price.

Table: Overall Project Finance Rating

	Design and Construction	Commissioning and Operating	Overall	
Bahrain	68.7	71.0	69.9	1
Oman	64.7	69.2	67.0	2
Saudi Arabia	61.4	68.5	65.0	3
UAE	63.5	65.1	64.3	4
Qatar	62.1	64.7	63.4	5
Kuwait	61.7	59.4	60.6	6
Israel	61.4	50.5	55.9	7
Egypt	48.9	50.5	49.7	8
Yemen	44.0	49.1	46.6	9
Iran	**43.1**	**49.5**	**46.3**	**10**

Source: BMI

Risks And Limitations To BMI's Project Finance Ratings

It should be noted that although we believe that the resultant scores are a reliable guide to project finance risks, the PFR assesses broad industry risks through macro and micro proxies, rather than individual projects. This has several implications. First, there will be instances where the risk profile – for example, the supply of inputs – of particular projects is markedly different from the general risks prevailing in the industry. Second, the PFR will not take into account measures by private sector project participants to mitigate risk when structuring finance – for example, by securing a substantial equity involvement from the sponsoring agency or government.

Foreign Direct Investment

The Islamic Republic is facing a significant challenge to its investment climate, with economic sanctions being imposed under the auspices of the UN and the US – a consequence of growing international pressure over Iran's alleged uranium enrichment programme.

While President Ahmadinejad has not sought to take a substantially tougher line on foreign investors, the heightened regional tensions that have accompanied his term in office have proved inclement for attracting more foreign direct investment (FDI). Still, the Iranian president has also committed to a five-year development plan, which supports structural economic reform. The truth is that despite some improvements in the early part of the 2000-2004 five-year plan, which saw the introduction of a new FDI law, much of the impetus has drained since 2003, as the political battle between conservatives and the weakened band of reformists intensified. With arbitrary political decisions the order of the day, Iran is unlikely to see a substantial improvement in FDI flows.

The key oil and gas sector has seen relatively little interest from foreign companies on account of the poor terms offered by the so-called 'buy back' contracts, which was a formula devised to get around Iran's historical antipathy to foreign equity ownership of its hydrocarbons. These contracts are arrangements in which the contractor funds all investments and receives remuneration from the National Iranian Oil Company (NIOC) in the form of an allocated production share, and then transfers operation of the field to NIOC after the contract is completed. This policy could prove harmful for Iran since, according to Oil Minister Kazem Vaziri Hamaneh, the country needs an annual investment of around US$20bn in the oil industry. The main sources of foreign investment are Germany, Italy, China and Turkey, with petrochemicals and oil and gas the key sectors.

Bureaucracy is widespread in Iran and one area where investors find it difficult to gain access is the traditional marketplace. This is centred on the bazaars, where a number of merchant families – *Bazaaris* – maintain a strong hold. On top of this, prominent internal oil companies in the past have been found guilty of maintaining 'slush funds' to pay to local businessmen. Meanwhile, excessive regulation and controls can impose considerable costs on businesses. In addition, Iran's private sector remains hamstrung by extensive red tape and other market distortions.

Labour Force

The working population is estimated at 26.2mn out of a total population approaching 70mn, and unemployment is estimated at 15% of the active population. Around 30% of the workforce is employed in agriculture, 25% in industry and 45% in services. In recent years robust oil and gas income from high oil prices has driven economic expansion, resulting in employment growth. However, economic growth is not matching the rise of new entrants to the labour market, who average750,000 a year. Additionally, job

creation in Iran remains a key challenge for the authorities. On a positive note, the World Bank has noted a phenomenal leap in the participation of women in the labour force in Iran, which has risen from 33% to 41% in the last five years.

The government faces a tough task in reforming Iran's highly convoluted raft of labour legislation, which remains a distinct problem for running businesses in the country. In some respects, labour laws are beneficial to business as strikes are not permitted and workers are not allowed to bargain collectively. Sometimes employers have demanded 'blank contracts', which workers are required to sign in order to get jobs, with the conditions subsequently filled in by the employer. However, the labour market operates under restrictive regulations that hinder employment and productivity growth. The non-salary cost of employing a worker is high, and dismissing an employee is costly.

Furthermore, regulations on increasing or contracting the number of work hours are very inflexible. Firing a worker requires the approval of the Islamic Labour Council or the Labour Discretionary Board. Hiring and firing costs are prohibitive, with the sum of social security payments and payroll taxes as a percentage of the worker's salary high by international standards. According to the World Bank, the firing cost is currently equal to 90.7 weeks of wages. In the rigidity of employment index – which measures the average of three sub-indexes: a difficulty of hiring index, a rigidity of hours index, and a difficulty of firing index – Iran scores a relatively high 49 out of 100. Overall, economic reform is having an effect in the workplace. Workers in establishments with fewer than 10 employees and workers in the carpet industry have had the protection of the labour law removed in recent years, in order to make the companies more competitive.

The government maintains a ban on independent trade unions. The labour code grants workers the right to form their own organisation, yet the state-controlled Workers' House is the only authorised labour organisation and a dissident labour leader who runs a union grouping of bus drivers was recently jailed for 'distributing statements against the system'. There are signs that the Islamic Republic is developing a more restive workforce. In 2007, tens of thousands of deprived workers gathered in Tehran to protest about their unpaid wages and the regime's anti-labour law, and similar protests were organised in other cities such as Shiraz, Mashhad and Semnan. Work stoppages are frequent in the public sector, often precipitated by the failure to pay civil servants.

Legal Framework

The Iranian legal system is very complicated. It has its historical foundations in Western systems and provides separate courts for civil and criminal hearings, plus higher and lower courts according to the value or seriousness of the case. However, in addition to these courts there are clerical tribunals, revolutionary tribunals, and the Court of Administrative Justice. Furthermore, the Iranian legal system is

firmly based on *shari'a* law – as it has been since the 1979 Revolution – with all judges and most members of the ruling clergy certified in Islamic Law.

Clerical tribunals, which function independently of the regular judicial framework, hear cases against the clergy and are accountable only to the Supreme Leader. The revolutionary tribunals, on the other hand, deal with crimes against national security, narcotics smuggling, and acts that undermine the Islamic state. Decisions rendered in these courts are final and cannot be appealed. The Court of Administrative Justice hears complaints against government officials, organs and statutes.

A complicated and poorly enforced commercial legal code undermines the effectiveness of the Iranian judicial system. The Supreme Leader appoints the head of the judiciary, who in turn appoints the head of the Supreme Court and the Chief Public Prosecutor. Though nominally independent, political influence and interference with the administration of justice is rife and the judiciary does not enjoy the independence theoretically accorded to it by constitutional provisions. Lower court judges are often pressured to investigate cases by senior officials with business or political interests to pursue. Safeguards for defence against unfair trial are minimal and conservative clerics still control the main levels of power in the judiciary. In addition, the system also suffers from structural inadequacies, which can result in irregular trial procedures. Resorting to the court system seldom leads to speedy dispute resolution and written contracts are only rarely of any use in investment disputes. Many foreign firms instead attempt to use connections with Iranian partners to ensure their interests are upheld.

Stoning and hanging are accepted means of execution, a penalty which can be applied to the charge of homosexuality, and children are still executed despite Iran signing up to international treaties that prohibit the practice. One recent case caused an outcry from Human Rights Watch and Amnesty International when a man was hanged for raping three other young men, although his alleged accusers withdrew their charges before he was convicted.

Property Rights

Foreigners nominally enjoy the same rights as nationals with regards to the leasing of houses, apartments, and offices, whether for dwelling or business purposes. For instance, in case of foreign investment, the Iranian government theoretically guarantees fair compensation when foreign investors' property is expropriated, and extends its protection to all foreign capital imported into the country.

However, in reality, foreigners do not have the same rights as Iranian nationals. Most foreign firms have bad experiences when disputing a contract, and written agreements offer very little protection for the contracting party. Indeed, according to the Heritage Foundation's International Index of Economic Freedom, Iran only scores 10 out of 100 in the property rights category, the worst score of any country in the Middle East. Often, finding an influential local business partner who enjoys substantial political patronage is the more effective way to protect contracts.

Intellectual Property Rights

Iran has its own trademark and patent law, and is a party to the Paris Convention for Protection of Industrial Property, which safeguards non-Iranians' rights to intellectual property. Iran also joined the World Intellectual Property Organisation Convention in 2002. However, Iran is not a member of the Berne Convention for the Protection of Literary and Artistic Works. Since Iran only has observer status with the WTO – due primarily to vehement US opposition – it does not comply with the TRIPS agreements. However, efforts are underway to modernise Iran's IPR regime, with the government planning to remove the defects in Iran's IPR system as part of the country's fourth Five Year Plan (2005-2009).

Tax Regime

The tax regime has undergone substantial reform, with a sharp reduction in the maximum corporate tax rate to 25%. Resident companies enjoy a corporate tax rate of 10% on taxable income, with the remainder taxed according to a progressive scale ranging between 12-54% according to their income. The authorities are planning to curb tax exemptions.

The maximum corporate tax rate is now capped at 25%, down from a previous cap of 54%. According to the tax code, the taxable income of companies or non-resident persons operating in sectors including construction, technical installations, transport, preparation of construction and installation drawings, surveying, supervising, and technical calculations is limited at just 12%. For companies quoted on the Tehran Stock Exchange, there is a further 10% rebate on taxes.

The top rate of income tax is 54%, on a sliding scale going down to 12%. Various ceilings within these bands have been raised in recent years. VAT does not exist, although there are plans to introduce a low VAT rate of just 7% in 2008. Low income Iranians are to be protected by the exemption from the VAT list of goods that are most commonly used by that section of the population. Foreign contractors sub-contracting part of their project to Iranian firms must pay a withholding tax of 2.5% from payments to the Iranian sub-contractor.

Corruption

Iran scored a dismal 2.3 in Transparency International's 2008 Corruption Perception Index, and ranked 141st out of 180 countries measured, dropping even further than the previous year. Worryingly, the Islamic Republic's score in the index has fallen every year since 2002, when it was 3.0, indicating a growing level of corruption in the country. With newspapers and news agencies tightly controlled and censored, there is little information available from inside the country on the level of corruption, and independent estimates, like Transparency International's CPI, remain the best indicator.

Macroeconomic Outlook

Barely Expanding This Year

BMI View: *We have revised down our FY2009/10 real GDP growth forecasts, primarily based on a small drop in oil output, a sharp slowdown in bank lending, and a number of indicators showing weakness in the industrial sector.*

We have lowered our growth forecast for FY2009/10 (note: Iranian years begin in March), though we still expect the Iranian economy to avoid a full-year contraction. We see real GDP growth coming in at 1.4% this year (we previously called for 2.4% expansion), well down on an estimated 4.7% in FY2008/09, and a confirmed 7.8% in FY2007/08. Thereafter, we expect growth to pick up, though the recovery will not be strong: we project average annual expansion of 3.2% over the course of our forecast period (FY2009/10 to FY2013/14). This represents lower trend growth than the estimated average 5.6% expansion through the oil boom of the preceding five-year period.

We still see downside risks to our FY2009/10 growth forecast. The central bank has not published official GDP statistics for FY2008/09 yet; when it does we could be forced to reassess our forecasts. Until then, we base our view on a number of other factors and indicators.

Lower Oil Production: Our oil and gas team forecasts Iran's oil output to drop by nearly 5% from 2008 to 2009, largely due to lower OPEC production quotas. The drop could have been a lot more, but it appears that Iran is not following its OPEC obligations to the letter: according to Bloomberg estimates, the Islamic Republic was exceeding its quota by around 12% in May.

Subdued Oil Prices: Oil prices do not *directly* impact real GDP figures, which only take into account volumes of oil produced. However, crude sales account for around 80% of Iran's total export revenues, and over the past five years the sector contributed about 26% of nominal GDP. A weak global oil market will certainly feed through into the wider economy. True, we had already factored relatively low oil prices into our growth forecasts, but it is worth reiterating the point.

We see the OPEC Basket averaging US$52.00/bbl in 2009, down a massive 44.7% y-o-y on 2008's average price of US$94.08. When oil prices collapsed in the late nineties, briefly flirting with the possibility of falling into the single digits, Iran managed to avoid an economic contraction. However, back then, the oil sector was a smaller part of the economy – between FY1993/94 and FY1996/97, it accounted for 16% of nominal GDP – and oil prices bounced back to their pre-crash levels fairly quickly.

As we do not see oil prices returning to 2008 levels anytime soon – we forecast the OPEC Basket to slowly rise to an average of US$70.00/bbl by 2013 – the impact on economic growth of the latest oil price crash could be more pronounced this year, and for the remainder of the forecast period.

Loan Growth Slowing: Banking sector data supports our view that the economy has already been slowing for some time, and that economic growth will remain subdued this year. Indeed, after loan growth averaged 31.3% y-o-y from FY2005/06 to FY2007/08 (as real GDP growth averaged 6.1%), it has since declined. In the first ten month of FY2008/09, loan growth averaged 18.4% y-o-y, dropping to just 9.0% in January 2009 (the latest data supplied by the central bank at the time of writing). This was the lowest rate of loan growth since at least 2002.

Moreover, the rate of loan growth fell below the consumer price inflation rate in June 2008, the first time this had happened in Iran since at least 2002. In January, loan growth (of 9.0% y-o-y) was still far below the inflation rate (24.0%) - in other words, loan growth in 'real' terms was still deeply in negative territory. Going forward, we expect (nominal) loan growth to remain in the single digits for the remainder of 2009, weighing on economic expansion.

The central bank does not divide loan data into segments, but the slowdown in lending has most likely been felt across the board. As such, we expect real private consumption growth to fall sharply in FY2009/10, to 2.5%, from an estimated 8.0% the year before and a confirmed 9.1% in FY2007/08. In spite of our expectations for such a sharp consumer slowdown, we still see risks as weighted to the downside.

Industrial Sector Weakness: We expect the industrial sector (incorporating manufacturing and mining, and construction), which constituted 17.4% of nominal GDP in FY2007/08, to perform particularly poorly this year. The sector grew (in real terms) at an average annual rate of 8.4% between FY2003/04 and FY2007/08, but a real contraction in FY2009/10 cannot be ruled out. We base this view on a number of indicators.

In 2008, investment in new manufacturing units had already come off 2007 levels (*see chart*). Though official data currently only goes up to the second quarter of FY2008/09 (effectively Q308), we would be surprised if there has been a noticeable pick up in investment since then. The lag effects of this slowdown in investment will continue to impact the industrial sector's growth this year, and likely in future years. In addition, growth in electricity production, which correlates fairly well with industrial sector real GDP growth, has been on a general downward trajectory for a number of years. Indeed, electricity output growth continued to trend lower over the first half of FY2008/09 (Q2-Q308), suggesting that industrial sector growth was already hitting the buffers. We expect this slowdown to continue into FY2009/10.

The construction sector is also exhibiting considerable weakness, with the construction services price index falling 22.3% q-o-q in Q408, with year-on-year growth dropping to 0.1%, compared to 40.4% in Q208. Demand for construction services has clearly fallen off a cliff. In addition, total private investment in new buildings within urban areas fell by 9.7% q-o-q in Q408, with the bulk of the quarterly fall accounted for by the 26.2% drop off in investment into new building starts. We expect total investment in building construction to continue to decline over the coming quarters, particularly as the lag effects of this slowdown in new starts feeds through.

Strengthening Rial: Over the course of 2008, the rial depreciated 5.9% against the dollar in nominal terms, but the real effective exchange rate (REER) strengthened considerably (note: an increasing REER signifies appreciation). Indeed, by the latter measure, the rial appreciated by 22.0% y-o-y in March 2009 (the latest IMF data). REER is used most often to judge a country's export competitiveness, but here we shall consider the effects on imports.

Iran's appreciating REER implies that imports are becoming cheaper, relative to domestically produced goods, thus providing incentives for Iranian consumers to substitute imports for domestic goods (and consequently impacting domestic economic output). In reality, the sequence of causality is not this smooth – certain domestically made products may not be substitutable with imports, and for those that are, the government has the power to impose high tariffs in order to protect domestic producers. However, if the currency continues to appreciate in real terms over the longer term, domestic producers are likely to find themselves at an increasing disadvantage.

The upshot of recent REER appreciation will mean that while exports are set to decline in real terms in FY2009/10 (due to lower oil exports, and the global recession reducing demand for Iranian non-oil goods), imports should hold up better. This will weigh on real GDP growth. That said, the REER has, since last November, stopped appreciating. If it continues to stagnate, then import growth could slow.

Are There Any Bright Spots?

While we have focused on the bad news thus far, there are nonetheless several reasons to be (somewhat) cheerful. Iran's relative isolation will provide its economy a degree of protection this year, and positive growth would see its economy outperforming most developed states across the world. Moreover, the rally in oil prices over the course of H109 will certainly help growth prospects. Indeed, this rally has meant that the current account balance is probably back in the black, after officially turning out a small deficit in Q408, and most likely a larger one in Q109.

Inflation continues to trend downwards. In May, the consumer price inflation came in at 15.0% y-o-y, way down on the 29.5% peak reached in October 2008. Over the coming months, we expect this disinflationary trend to continue, with inflation possibly falling into the high single digits in late 2009, due to base effects primarily. We have pencilled in an end FY2009/10 (next March) inflation rate of

14.0%. Longer term, however, the re-election of President Mahmoud Ahmadinejad brings with it upside inflationary risks (see *Monetary Policy*).

Furthermore, the government continues to pursue an expansionary fiscal policy. While this will mean that its fiscal position weakens considerably this year (see *Fiscal Policy*), and that there are serious question marks over how sustainable Tehran's fiscal excess is over the longer term, public consumption growth could support real GDP growth this year.

Risks To Outlook

In the aftermath of the post-election crackdown of opposition supporters, the US government has been making sounds about tightening up existing economic sanctions against Iran. Tougher sanctions, either imposed unilaterally by the US, or instigated via the UN, could weigh on economic growth. In addition, oil prices pose both upside and downside risks to our growth forecasts. We reiterate our view that, on balance, we see risks to our growth forecasts, at least for FY2009/10, as weighted to the downside.

Table: Iran – Economic Activity

	2004	2005	2006	2007	2008e	2009f	2010f	2011f	2012f	2013f
Nominal GDP, IRRbn [1,2]	1406031	1697306	2044024	2654948	3476260	3391065	3954011	4606934	5319845	6072717
Nominal GDP, US$bn [1,2]	161.1	187.9	223.5	286.3	363.4	325.4	351.7	394.2	446.3	499.4
Real GDP growth, % change y-o-y [1,2]	5.1	4.7	5.8	7.8	4.7	1.4	3.4	4.2	3.8	3.4
GDP per capita, US$ [1,2]	2,346	2,707	3,181	4,020	5,034	4,447	4,741	5,243	5,856	6,466
Population, mn [3]	68.7	69.4	70.3	71.2	72.2	73.2	74.2	75.2	76.2	77.2

Notes: [e] BMI estimates. [f] BMI forecasts. [1] Year Begins in March (Iranian calendar); Sources: [2] CBI/BMI. [3] IMF/BMI.

Political Outlook

Domestic Politics

Long-Term Political Risk Rising

BMI View: *Iran is likely to remain stable in the short-to-medium term, although June's disputed elections and the government's subsequent response has severely dented the latter's legitimacy. Fissures have opened up within the regime hierarchy, which poses risks to long-term political stability.*

In the short term, the Iranian government is in little danger of collapse. While the scale of the protests and the strength of feeling in the aftermath of June's disputed presidential elections appeared to have caught the regime off guard, at least initially, a robust crackdown by security forces quickly quelled the unrest. However, recent events could have considerable long-term implications. Indeed, the government's handling of the election and the subsequent protests could well adversely impact the Islamic Republic's long-term political stability. As such, we have lowered our long-term political risk rating for Iran from 50.2 to 46.8.

The protests that convulsed Tehran in the fortnight following June 12's polls mainly arose due to widespread suspicions of vote rigging in favour of the incumbent, President Mahmoud Ahmadinejad. They were the largest demonstrations of public discontent in Iran since the Islamic Revolution 30 years ago – the strength of feeling was clear to see. However, while the protestors may have been united over the perceived injustice of the election, they were by no means united over their desired vision of the future. For this reason, above all, the protests ran out of steam once the government made a concerted effort to break them up.

Indeed, thirty years ago it took a year of gradually intensifying popular protest to dislodge the Shah, and in spite of differing political ideologies, those agitating for change were broadly united behind a charismatic leader – Ayatollah Ruhollah Khomeini. The regime clearly demonstrated that it would not allow that sort of momentum to build this time around, and the defeated reformist challenger to Ahmadinejad, Mir-Hossein Mousavi, who became the de facto leader of the protestors, could hardly be described as charismatic. With Mousavi unable to present a compelling vision of change for the future, and with the army, police and the Basij militia remaining firmly behind the government, the unrest was subdued fairly easily. Moreover, though a number of protestors were killed (an accurate figure is impossible to obtain), no instances of mass bloodshed were reported, instances that could have swung public sentiment against the regime.

Government Legitimacy Badly Damaged

According to a June 24 report in the *Iran News* newspaper, Ahmadinejad will be sworn in before parliament at some time between July 26 and August 19. In the short term, at least, policy continuity is not under threat. However, recent events could have considerable long-term implications. Many Iranians believe that the June 12 election was rigged in favour of Ahmadinejad, and most of these people are unlikely to be dissuaded from this view even if solid evidence of electoral fraud never sees the light of day, leaving them disillusioned with the political process. While Iran is by no means a democracy in the Western sense, and presidential candidates are thoroughly vetted before being allowed to stand, the actual presidential elections themselves have generally been regarded as relatively free and fair (though perhaps not by Western standards).

The regime has traditionally upheld this state of affairs, using popular elections as a tool for enhancing its legitimacy. Indeed, the reformist former president Mohammed Khatami was not stopped from winning two presidential elections (in 1997 and 2001), despite being despised by many regime insiders. Consequently, suspicions of vote rigging have seriously eroded the regime's legitimacy in the eyes of much of the population. In his first speech to the nation following the elections, Ahmadinejad insisted his re-election was fair, stating: 'It was the most clean and free election in the world.' This is unlikely to convince his opponents.

Regime Splits Emerging

As suggested above, the government's legitimacy is likely to have been damaged by current events, but that does not mean we foresee its downfall any time soon. As long as the military remains loyal to Supreme Leader Ayatollah Ali Khamenei and the government, which is what we expect, structural political change is unlikely.

However, it is increasingly apparent that there are serious fractures within the regime itself. Indeed, in early July, one of Iran's largest group of clerics, the reformist Association of Researchers and Teachers of Qom, declared Ahmadinejad's re-election to be illegitimate and condemned the crackdown by the security forces. Ahmadinejad has long had a difficult relationship with the clerical establishment, and so the Association's point of view is not particularly surprising. However, its very public display of defiance represents not only a challenge to Ahmadinejad, but also to Khamenei, who had strongly endorsed the incumbent's victory very shortly after the election itself.

On the other hand, another powerful clerical grouping, the Society of Scholars of Qom Seminary, threw its support behind Ahmadinejad in early July. The group had initially refused to back Ahmadinejad, and its show of support does not necessarily represent a sudden shift in its position. However, for the sake of political stability, they most likely reasoned that a display of unity was called for.

The post-election fallout suggests that going forward, Khamenei may not be able to rely on universal support from within the regime hierarchy. Though the Supreme Leader is the true centre of power in Iran and sets the agenda on the big issues of foreign policy, relations with the West, and the nuclear programme, he has traditionally remained above day to day politics (which is not to say that he does not implicitly favour certain candidates over others when it comes to elections). However, by effectively coming out in overt support of Ahmadinejad, and by refusing to hear the complaints of the defeated candidates regarding improprieties in the electoral process, he has compromised his position, essentially becoming a factional leader.

Opposition Bloc To Take Shape?

At present, those opposed to the Khamenei/Ahmadinejad 'faction' have not formed a coherent political grouping yet, but a key candidate for its leadership (if it does emerge) is former president Ali Akbar Hashemi Rafsanjani, who is now chairman of both the powerful Assembly of Experts and the Expediency Council. Though Rafsanjani has kept relatively quiet since June 12 so far, he has little affection for Ahmadinejad, and backed Mousavi during the election campaign. If a Rafsanjani/Mousavi bloc were to emerge, it could challenge the Khamenei/Ahmadinejad faction.

It must be stressed that neither faction would desire to bring down the current regime. The wealthy Rafsanjani, in particular, has much interest in maintaining the status quo, and his antipathy towards Ahmadinejad stems from the latter's vehement criticism of him as corrupt. Indeed, Ahmadinejad's pious and populist positioning of himself as outside of the clerical establishment (albeit while maintaining Khamenei's support) represents a more radical stance than a Rafsanjani/Mousavi bloc is likely to ever take.

Rafsanjani is not the only cleric who sees Ahmadinejad's brand of populism as potentially threatening to their established positions. Indeed, only one of the nine ayatollahs holding the highest clerical rank has congratulated Ahmadinejad on his election victory, while three of them have publicly criticised the election and subsequent rounding up of protestors. Ahmadinejad sees the clerical establishment as privileged and corrupt (perhaps justifiably), but they still carry much influence across Iran. If factional infighting persists, the unintended consequences could damage the regime from within, potentially posing a greater threat than that of the protestors to the government's long-term vitality. It is this heightened risk that the regime tears itself up from within that is the basis for our downward revision to Iran's long-term political risk rating.

Foreign Policy

No Rapprochement And Tougher Sanctions

BMI View: *Iran's nuclear programme, and not its domestic political dynamics, are of primary concern to the West. With Tehran continuing to build up its uranium enrichment capabilities and President Mahmoud Ahmadinejad likely to keep up his anti-West stance during his second term, Iran's relations with the West will remain highly strained.*

June's controversial presidential elections and the government's robust response to the subsequent unrest have not materially altered Iran's international relations with the West. True, the diplomatic language emanating from European capitals in particular has been sharp of late, and for its part, Tehran has fanned the flames by accusing the Western powers of inciting the anti-government protests that followed the polls. However, Iranian-Western relations were already at a very low ebb – short of war, they could hardly have been much worse. Moreover, once the diplomatic rhetoric is stripped away, all sides know that the West is chiefly concerned about just one issue: Iran's nuclear programme. Indeed, for as long as the Islamic Republic pursues its nuclear ambitions, the West has little choice but to attempt to engage Tehran.

The early Iran strategy of US President Barack Obama, that of trying to open up a meaningful dialogue with Tehran by adopting a more engaging tone than his predecessor, appears increasingly unlikely to bear fruit. This will not be because of a refusal on Washington's part to deal with a government that represses its populace and which presides over flawed elections. After all, the US has relations with many states that are far less democratic than Iran (although clearly the events of June have not helped). Rather, with US policy towards Iran firmly aimed at halting the latter's uranium enrichment programme, and with Tehran apparently unwilling to budge on the issue, the two sides find themselves at an impasse. Furthermore, the Iranian regime is well aware that no matter how conciliatory a manner Obama adopts, his goal is essentially the same as former president George W. Bush's. As such, Tehran will continue to be extremely wary of any ostensibly friendly entreaties from Washington.

Consequently, we stick to our view that there seems little chance of a rapprochement with the Western powers in the short-to-medium term. In addition, the nuclear issue will only grow in significance as Iran's nuclear programme continues to expand: the latest IAEA report (in early June) states that between the start of February and the end of May, Iran added 984 operational centrifuges to its uranium enrichment facility in Natanz, bringing the total to 4,920, and that a further 2,301 were in various stages of preparation and installation. While there is no publicly available evidence to suggest that Iran has attempted to enrich uranium to weapons-grade concentrations, its ongoing expansion of the enrichment facility means that the lag time required to 'go nuclear' continues to come down. Moreover, the West will continue to suspect that the nuclear programme is ultimately intended for military purposes.

In many respects, the re-election of President Mahmoud Ahmadinejad has made life easier for Washington. Indeed, if opposition candidate Mir-Hossein Mousavi had emerged victorious from the presidential contest, the US could have faced a more challenging diplomatic situation. Mousavi had no intention of halting Iran's uranium enrichment programme – the power to do so would have remained with the Supreme Leader Ayatollah Ali Khamenei in any case – but by coming across as a relative liberal, it would have been harder to mobilise international opinion against him, and by proxy, Iran. Ahmadinejad, for his part, has won few friends in Western capitals over the past four years; this is unlikely to change over the next four. The chances of a thawing in US-Iran relations during Ahmadinejad's second term seem remote.

More Sanctions Likely

The upshot of the ongoing nuclear standoff is likely to be that the West imposes tougher economic sanctions on Iran. In early July, US Secretary of State Hillary Clinton said that 'even though we are cautiously pursuing a policy of engagement, we are doing it with our eyes open… We understand that, given the problems Iran has just demonstrated, it may not be possible… in which case we would ask the world to join us in imposing even stricter sanctions on Iran to try to change the behaviour of the regime.' Furthermore, the G8 has given Iran until it meets again in late September to accept negotiations over its nuclear programme. French President Nicolas Sarkozy has hinted that if no progress is made by then, harsher sanctions are likely. Any response from Iran is unlikely to satisfy the West, and we would expect the latter to therefore push for stronger measures.

If sanctions are indeed tightened, it will serve to make Iran even less attractive to foreign investors. That said, with Russia and China likely to drag their feet on any proposals to inflict a fourth round of UN sanctions, tougher measures could instead be imposed unilaterally by the US and/or the EU. Consequently, non-Western companies will likely face far fewer restrictions on doing business in the Islamic Republic. What foreign investment Iran does attract over the coming years will mainly come from countries relatively immune from US diplomatic pressure.

Top of this list is likely to be China, which has been fairly active in Iran in recent months. Indeed, in January this year China's **CNPC** struck a US$2bn deal for the development of Iran's North Azadegan oil field, and in June it replaced French major **Total** in a gas project that could be worth US$4.7bn. Washington is likely to continue to put pressure on international oil companies (IOCs), which effectively suspended operations in Iran in 2008, to refrain from further investments. We stick to this view despite the June 9 statement by the Iranian Oil Minister Gholam Hossein Nozari that European oil majors **Royal Dutch Shell** and **Repsol YPF** have reportedly submitted new proposals for the upstream development of the giant South Pars gas field.

US Military Attack Unlikely

We continue to see US commitments in Iraq and Afghanistan as precluding a major military offensive

against Iran. However, even a targeted attack on the Islamic Republic's nuclear facilities would not be without consequence. Tehran would be expected to retaliate by disrupting shipping in the Persian Gulf and possibly using its proxies to attack US interests around the world. Iran could cause the US a great deal of trouble in Iraq in particular, a thought that will certainly not be lost on US military planners.

Company Monitor

Iran Power Plant Projects Management Co. (Mapna)

SWOT Analysis

Strengths

- Mapna is one of the largest contractors of power and industrial projects in Iran, with 29 subsidiary companies
- Iran's government is planning heavy investment in the electricity sector

Weaknesses

- Sanctions, coupled with the global economic downturn, have helped to create a dire fiscal situation in Iran, which could restrict public investment infrastructure
- High inflation is damaging the business environment

Opportunities

- With Iranian electricity demand rising rapidly, there is great scope for constructing new power plants, and Mapna is at the forefront of this

Threats

- International pressure on Iran regarding its nuclear ambitions could derail the economy and restrict Mapna's international expansion

Overview

Mapna is a major state-owned Iranian industrial conglomerate with 29 subsidiaries operating in the power, oil, railway and infrastructure sectors. In terms of infrastructure, the company specialises in power, oil and gas, and petrochemicals projects, as well as railway transportation projects. The company has also recently expanded into operational and maintenance services to enable it secure more international projects.

Company Data

Since being launched in 1992, the company has undertaken projects worth EUR17bn, in terms of power projects, and has been responsible for building 86% of Iran's total grid capacity, representing 52,000MW. Turnover is around EUR4bn per year.

Strategy And Evaluation

Looking to the future, Mapna's strategy appears to be one of international expansion. As well as power plants in Sri Lanka and India, the company has also been awarded the contract for the 324MW Najaf power plant, as well as the 324MW Al-Emarah Power plant, both of which are in Iraq. **BMI** believes that the reconstruction of Iraq – which neighbours Iran – could be a strong area of growth for Mapna, as the country looks to repair its shattered infrastructure.

However, Mapna's biggest projects remain in Iran. These include the Khouzestan Steel Complex Combined Cycle Power Plant, which will have a capacity of 968MW. The company is also negotiating a major deal to construct

Address

- No. 231 Mirdamad Blvd.

Key Statistics

- Year established: 1992

a massive combined cycle power plant with a capacity of 2,100MW. Indeed, out of Mapna's current order book of 26 projects, only two are outside Iran. With the country's rapidly growing demand for electricity, we think Mapna's main focus will be inwards over the forecast period. In 2008, Iran's electricity consumption stood at 182.1TWh, but should grow to 212TWh by 2013 and Mapna is in discussions over constructing power plants in Iran with a total capacity of 11,760MW.

Recent Activity And Projects

In recent years Mapna has financed 10 independent power projects including the South Isfahan (954MW), Tous (954MW) and Asalouyeh (954MW) plants. It is also in the process of developing the Mobin Gas Utility Power Plant (1,944MW), as well as power plants in Sri Lanka and Syria. In addition, in September 2008, Mapna agreed a deal with Iran National Petrochemcial Company (NPC) to construct the first phase of the EUR1.2bn Damavand Petrochemical Complex. NPC is to provide 80% of the funding, with Mapna supplying the remaining.

Mapna has also been active in the rail sector for 15 years and is currently completing a project involving the construction of 200 locomotive units, through a partnership with Germany's Siemens. Mapna is also contracted to produce three locomotives per month for the Iran Railway Company.

In October 2009, Iran's government announced that it would need to construct power plants generating 26,500MW of energy in the next five years in order to meet electricity consumption rates. Annual consumption has been growing at 8% per year according to the Iranian Energy ministry. Such an ambitious expansion plan could result in numerous contracts for Mapna, which has built the majority of Iran's current electricity grid.

In September 2009, as reported by the *Fars News Agency*, the Energy Ministry approved EUR880mn in financing from the oil stabilisation budget to develop independent power plants. Four years ago there was no private sector presence in the electricity sector. Now independent providers produce 3961MW of electricity per year. This paradigm shift could see Mapna take on fewer contracts in the coming years.