Emerging Markets Insight

BY MIRAE ASSET FINANCIAL GROUP Q2 2016

Come, make in India! Come, manufacture in India!

INDIAN MANUFACTURING

RIDING THE GOOD WAVE

Despite recessionary conditions and weakening of international demand, Make in India campaign by PM Narendra Modi has been showing good results on the ground.

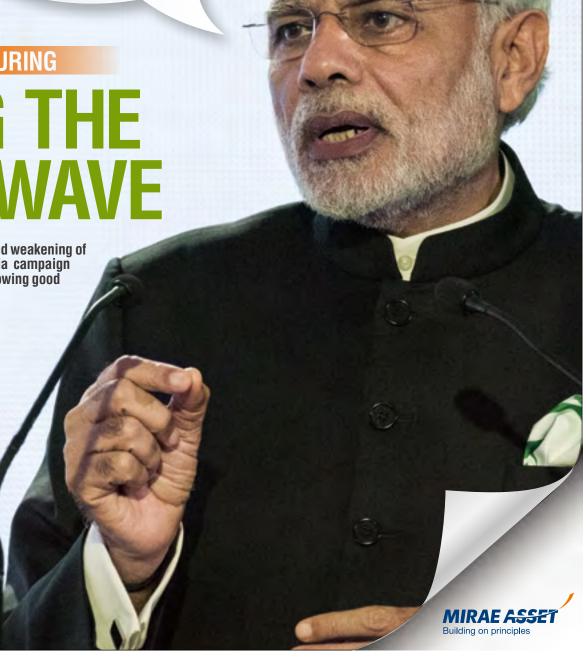
PLUS +

SPECIAL INTERVIEW

Joe Studwell LOOKING FOR A SUCCESS FORMULA

BRAZILIAN BUSINESS

NEST OF STARTUPS



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Special Interview

Joe Studwell **LOOKING FOR A** SUCCESS FORMULA

Why some countries succeed and some don't.

Indian Manufacturing

RIDING THE GOOD WAVE

Despite recessionary conditions and good results on the ground.

NEST OF STARTUPS

Large companies are establishing support hubs for new businesses aiming at continuous innovation; and more than ever, that is what Brazil needs.





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COMMERCIAL & PRODUCT JORGE SIERRA DIRECTOR

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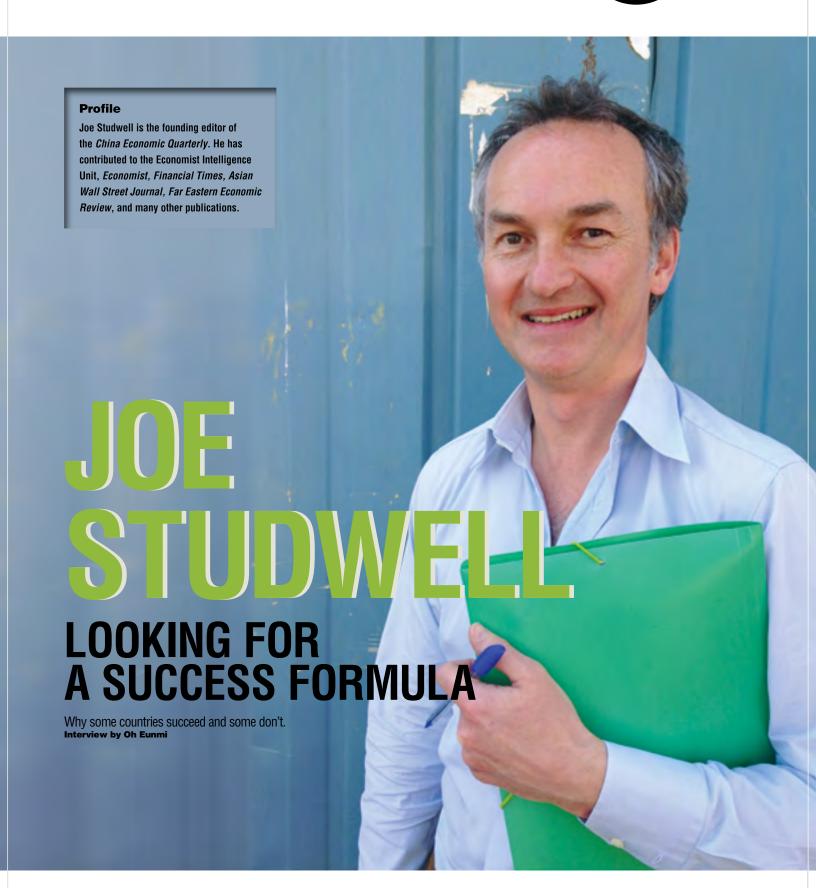
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You are a well-known expert on the Asian economy who has spent twenty years writing for the *Economist*, *Financial Times*, and the *Asian Wall Street Journal*, and you were also editor of the *China Economic Quarterly*. What drives and motivates you to look closely into Asia?

What caused me to look at Asia originally was my British wife, who read Chinese at Cambridge and forced me to move to China! But I was readily interested in the region because I studied history. The quickest economic and institutional development stories that the world has seen are interesting to any historian.

Beyond that, I like change, and East Asia has tremendous variety. Over the long term, I wanted to understand who had done better and who had done worse at development, and why. And I guess I stuck

at the job. Although, having said that, now I am being drawn into looking at Ethiopia, which is seeking to adapt and replicate key lessons from Japan, ROK, Taiwan, China, and Vietnam.

In your book, *How Asia Works*, which has recently been introduced to Korean readers, you mention three major factors that determined success and failure of East Asian countries: land reform based on highly labor-intensive household farming; export-driven manufacturing; and state-backed financial repression. Could you explain briefly the implications and impact these three factors have on the region?

In short, prerequisites to development success at the early stage include three ingredients: land reform; export-led, state-backed manufacturing; and financial

repression. The process begins by reforming agricultural land ownership to encourage small-plot, high-yield household farming. High-yield household agriculture is important because most people in poor countries are farmers. The farm labor that poor countries have in abundance can contribute to raise productivity. If you create surplus for them, you get broad-based development. That is important not only because equity is morally attractive, but because it primes what I call a "capitalist laboratory" in which everyone has a bit of capital. So everyone can be a capitalist entrepreneur. I believe in capitalism.

However, growth of a country cannot be maintained by only agriculture. Emerging countries have to move to the next level. That phase has historically revolved around manufacturing. This is the second condition





for development success. After high-yield, small-scale agriculture, manufacturing is important because it soaks up lots of labor and trains people on the job in factories. A large number of relatively unskilled laborers create value in factories by working with machines that can be easily purchased on the world market and yield unlimited economies of scale (which is a means of overcoming the human capital constraint).

Manufacturing provides much easier access to global trade than services. Manufactures are readily exportable whereas there are greater constraints on trade in services. Genuine free trades in services would require free movement of laborers around the world.

Thus, there should be a policy to protect and subsidize domestic manufacturers until they acquire technological capacity and industrial competitiveness. However there should also be continual testing and benchmarking of the manufacturers that are given market protection by forcing them to export their goods and hence face global competition instead. It is their level of exports that reveals whether they merit state support or not.

This is what I call "export discipline," which is clearly different from "rent seeking" (the risk that protection and subsidy can bring, when entrepreneurs obtain state support without delivering the technological progress and competitiveness the economic development requires).

Of course I don't need to tell Koreans this. Your household agriculture performance was not as good as Taiwan's, but you are the kings of rapid technology accumulation through scale manufacturing.

Aside from high-yield, small-scale agriculture and a big over-emphasis on manufacturing — which are really two "tricks" to accelerate economic development — you need a closely controlled financial system that prioritizes long-run technology accu-

mulation over short-term profit, at least until you hit about US\$10,000 GDP per capita (in today's money). This involves closely controlled banks, very gradual equity and bond market development, and capital controls. Later, of course, you have to start to run your financial system more like rich countries.

GDP per capita of Korea and Taiwan has reached about US\$20,000 while that of Indonesia and Thailand lingers around US\$3,000–5,000. And this economic gap is much wider now than it was after World War II. Was there a crucial moment that explains this widening gap?

Well, Thailand and Indonesia (and the Philippines and Malaysia) failed to deliver widespread land reform, aggressive smallholder extension support to support high yields, and finance for farmers. So their agriculture is much lower yield than Korea or Taiwan, and this difference became apparent in the 1960s and 1970s. Then, the Southeast Asian countries didn't really have an indigenous industrialization strategy (though Mahathir in Malaysia, and Habibie in Indonesia, tried for a few years).

Instead the Southeast Asian countries depended too much on FDI directed at manufacturing processing activities. This

There should be a policy to protect domestic manufacturers until they acquire technological capacity and industrial competitiveness.

gave growth and jobs for a while, but as Kunio Yoshihara said way back in the 1980s, it was "technology-less industrialization."

And the Southeast Asian countries also listened to terrible IMF and World Bank advice to ramp up stock markets at an early stage and get rid of capital controls. The real "crucial moment," to answer your question, came in 1997 when the Asian Financial Crisis started.

All the FDI in processing was already relocating to China, which then had cheaper labor and better supply chains, and the foreign debt capital in Southeast Asia ran for the exit as currencies came under pressure because of big current account deficits. Why were there current account deficits? Because the countries didn't have the technological capacity to build domestic export bases that could earn forex.

You will remember that the "IMF Crisis," as you Koreans quite reasonably called it, hit Korea too, partly through the bond market. But because Korea had a serious domestic industrialization strategy you bounced back very quickly. Southeast Asia did not.

Some say that land reform also put negative impact on rural capital accumulation due to heavy agricultural taxes and insecure protections of property rights. What is your opinion on that?

I guess this question is specifically about Korea, and as I already said, Korea did not do agricultural policy particularly well. So I would agree with the question. But there was still a substantial land reform and support for household farming, especially in the 1970s, in Korea, so in relative terms the story was much better than Southeast Asia. If one wanted to see better agriculture policy in the 1960s and 1970s, one had to go to Taiwan. In fact, you still can go and visit the Land Reform Museum in Taipei. The last time I went I was the only person there! It



seems that no one cares about the agricultural sector once a country is rich, but the agricultural sector is fundamental to a good takeoff.

Can't we find any other successful economic models that do not follow a recipe with the three ingredients (land reform; export-driven manufacturing; financial repression)? Let's take India. India seems to have already become a service-led economy (such as IT) by leaping (or skipping) manufacturing-led economy. Do you believe countries like India still need to incubate globally competitive manufacturers?

India is just a bit of a mess, frankly. There are a few states with land reform and higher-yield farming, and other places that remain essentially feudal. Absolutely they need a manufacturing strategy, and an infrastructure strategy that is an extension of a manufacturing strategy, and there is a lot of talk about this. I think we will see some progress under Modi, but at the end of the day the Indian economy is one-third the size of the Chinese economy (with very similarly sized populations), and there is a reason for this — the Chinese had better policies and implemented them.

There is lots of media coverage about India's service sector, and some very impressive firms, but the Indian IT industry employs only about three million people, compared with some 200 million in Chinese manufacturing.

You can't move fast with a services-based strategy because services are relatively more dependent on high-quality human capital, which is just what you don't have in the early stages of development. Asian markets seem to search for further growth from consumption based on their already heavy and fast-growing middle-income population, and the service industry has been the core of consumer market growth.





It seems to imply that one country can achieve success through service industry.

Well, it's another stages thing. As I say, service skills are slower and more expensive to acquire than manufacturing skills. So you pluck the low-hanging fruit and emphasize manufacturing first. It is kind of like you are shunting the economy forward through the "tricks" of land reform and infant industry strategy, and then you get some extra money while you wait for your people to catch up (and pay for them to catch up through investment in education).

China has to re-balance to consumption now because the easy gains in the manufacturing strategy have been taken, and the Incremental Capital Output Ratio (what you get out for the additional investment you put in to industry) has become lower and lower. So it is all about services in contemporary China — now at US\$9,000 GDP per capita — just has it has been in Taiwan and Korea since the late 1990s.

Until when do you think it proper that one country maintains protectionism and financial repression that aim to support domestic manufacturing?

Let's think about Korea. Do you believe the IMF's restructuring and modernization in 1997 was well-timed intervention for Korea? What would have happened if protectionism continued in Korea?

A very rough rule of thumb in today's money for allowing real market dominance would be US\$10,000 GDP per capita. Maybe a bit more, maybe a bit less, but that is the ball park. Of course you don't just put on the handbrake and do a U-turn, you have to dismantle protection bit by bit and financial sector deregulation is very challenging — look at the crises in Japan and Korea, and at the severe asset price inflation and deflation of the late 1980s and 1990s that occurred in Taiwan. It is not easy to open up a financial system, but it

becomes necessary, and at least once you have US\$10,000 per capita you are confronting "rich people's problems." These problems are generally more attractive than poor people's problems.

The thing you don't mention in your question is institutional development and institutional sequencing, and this is the subject we understand even less about than financial deregulation. Everything from democratic institutions to judicial systems to grassroots civil society. How should we optimally construct these institutions and in what sequence? This, for me, is that last black box of development economics.

Asian markets seem to search for further growth from consumption based on their already heavy and fast-growing middle-income population.

On Korea, I did think that the IMF intervention was relatively well timed and helped Korea to break some vested interests that were very entrenched. I disagree on this subject with Ha Joon Chang, who attacked the IMF and World Bank strategies in Korea after the Asian crisis and said Korea needed a "second-stage" catching-up strategy. But he never, to my knowledge, really specified what this strategy should be. (I should say he is very helpful on other subjects.)

Undeniably, export discipline and financial repression led to a sustained wealth transfer to exporting companies from house-

holds. However, wouldn't it have been better to open up to imports and allow citizens to benefit from lowered consumer prices by the fostered competition at home? There is a possibility that consumption could have been another growth engine.

As already discussed, consumption is a growth engine but it has to be de-prioritized somewhat when a nation needs to raise its technological level and can do so relatively cheaply through a manufacturing strategy that generates exports and foreign exchange.

If you want to see premature consumption, go and live in Southeast Asia. You can get a bank loan and credit card for whatever you want in Jakarta, but the Indonesians can't build a ship or a tractor. Too much consumption — especially of imported goods — too early just means you get stuck at a technological equilibrium (or a "production function" as economists term it) that you don't want to be stuck at. Of course the neo-classicals say that "the market" will take care of any such problem. But try telling that to Latin Americans or Southeast Asians. Or Russians. Or Greeks. Et cetera, et cetera.

After achieving development, what would be the next step Northeast Asian countries should take? The growth of China's export-driven economy seems to be slowing these days. Japan, once a successful model for other Northeast Asian economies, is also experiencing a sluggish economy.

Well, Japan is a US\$35,000 GDP-per-capita country and China is a US\$9,000 GDP-per-capita country, so they are not the same. China is in the midst of an initial move to a more consumption-based model, a "structural adjustment" of its industrial policy, and some significant financial sector deregulation. Japan had begun to do these things in the 1970s and 1980s, but after its stock market crash from 1989, Japan failed to fol-



low through with deeper reforms. Bad debts in the banking system were not addressed quickly enough, labor-market reforms were not pushed through for "lifetime" employees (leaving young, temporary workers to bear the brunt of adjustment) and agriculture failed to scale up and learn to live without subsidies. Japan is simply a reminder that the developmental state has to give way to the market when its job is done. Personally, I find Japan more worrying than China at present. But, as I said earlier, Japan is at least facing "rich country problems."

You are currently back to academia after a twenty-year career as an Asia economy expert. What academic interests have driven you to study more?

I found it very strange and difficult returning to university. In many subjects these days there is a tyranny of theory, whereby students and academics decide first what their theory is and then try to test it in the real world.

My preference is always to look at the world first and then seek theory by induction and by reference to existing theory. At Cambridge, I was asked immediately: "What is your research question?", to which I could only reply: "I am not sure, I haven't done any field work yet." So I am afraid I am a bad student. But I am enjoying my work. Hopefully the British government will eventually be satisfied it received some

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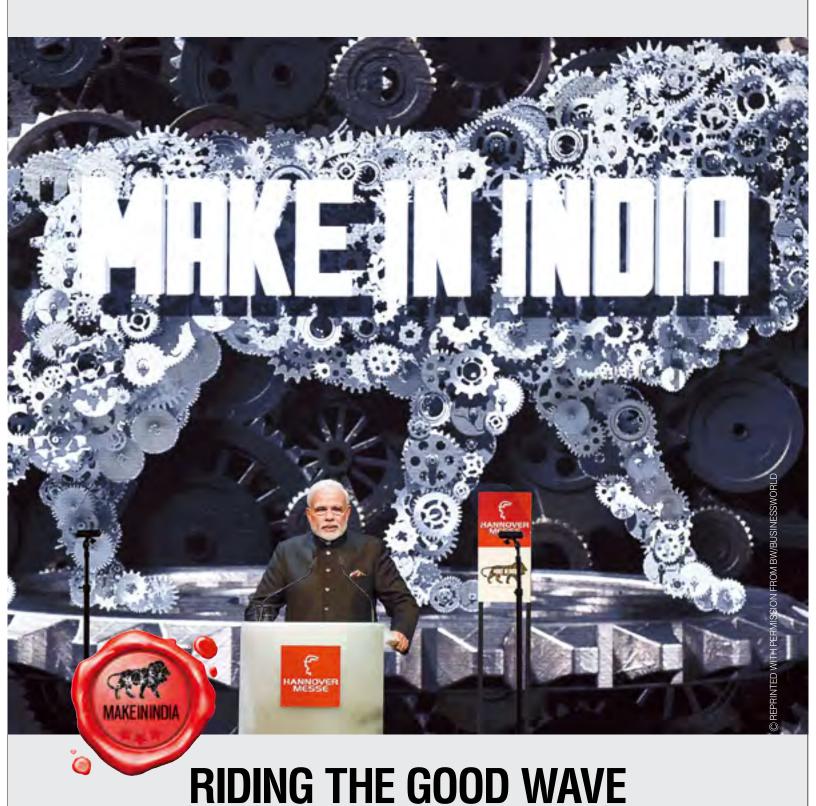
minimum value for the PhD funding that it generously provided me.

As to my actual research work, I am looking at the history of technological learning in the Chinese power-generation equipment sector since 1980. It sounds a bit boring but it is actually quite interesting.

More generally, it is a good time to be at university in my field because the war against so-called "neo-liberalism" and the "Washington consensus" has essentially been won. People are beginning to refocus on questions that we actually do not know the answers to. The greatest of these, for me, is to begin to understand more about institutional development and what I term institutional sequencing. Of course this subject matter actually reflects the neo-classical agenda, because neo-classicals always say that good markets are about good institutions. The problem is they have so little to say about how good institutions are constructed, and how big the capital costs (or "inception" costs), as well as the operating costs, of institutions are.







Despite recessionary conditions and weakening of international demand, Make in India 2.0 has been showing good results on the ground.

By Suman K. Jha



"Come, make in India. Come, manufacture in India; sell in any country of the world but manufacture here. We have got the skills, talent, discipline, and determination . . . From electrical to electronics, from chemicals to pharmaceuticals, from automobiles to agro value additions, from paper or plastic, from satellite or submarine, come, make in India."

This is the almost poetic exhortation that Prime Minister Narendra Modi made from the Red Fort in his maiden Independence Day speech in 2014. He has been delivering the same message to industry captains, both in India and abroad.

"MAKE IN INDIA" IS ONE OF THE MOST POWERFUL IDEAS EVER TO HAVE BEEN LAUNCHED IN INDIA.

The Make in India campaign, which kicked off on September 25, 2014, was devised to make India a manufacturing hub, push the manufacturing sector's share to 25 percent of gross domestic product by 2025 from the current stagnant 17 percent, and make the manufacturing industry

worth US\$1 trillion a decade from now.

The object is clear: to create millions of jobs in an under-employed nation, jump-start consumption, make India an integral part of the global supply chain, and lead the country to the path of double-digit growth in the coming years.

"It was one of the most powerful ideas ever to have been launched in independent India," says Confederation of Indian Industry (CII) president Sumit Mazumder.

What's behind the slogan

To be fair, this is not the first time the government is pushing a Make in India drive.





THE DEFENSE MINISTRY HAS A TARGET TO ACHIEVE 70 PERCENT INDIGENIZATION BY 2027

Immediately after Indian independence, public-sector units powered the first Make in India movement. After the 1991 opening of the economy, private enterprises led phase two of the Make in India movement. So the Modi government's new thrust on the manufacturing sector is the third wave of the Make in India movement.

With employment not picking up and a million heads being added to the Indian workforce every year, and the services having bypassed the manufacturing sector, the government was forced to rearrange its priorities and focus on labor-intensive, lowcost manufacturing plans, at a time when the world is talking about a fourth industrial revolution.

"We are reaping the benefits of the demographic dividend. If jobs don't increase commensurate with the growing numbers of the working population, which is what the ramping up of the manufacturing sector would do, there could be unrest," says Mazumder.

This massive manufacturing push is expected to create 100 million more jobs for India's youth by 2022.

Former Planning Commission member Arun Maira says that Modi's new thrust on Make in India is consistent with the erstwhile Planning Commission's similar proposal, "which was not pushed by the previous UPA government." Certifying the Modi program, Maira adds, "We need to create jobs. Manufacturing is the right way to go about it."

Tackling over-regulation

Logically, the first step was to introduce a slew of measures that made both starting and doing business in India easier. The slogan "Ease of doing business" was coined by the Prime Minister and was followed up by liberalizing the foreign direct investment (FDI) regime. The target set was to place India among the top 50 countries in terms of ease of doing business within the next three years.

Some significant steps have been taken. The new regime now says no minimum capital, no common seal, and no declaration of commencement of business are required to begin operations. Documents for exports and imports have been reduced from 11 to three. More than half of the defense items (56 percent) are taken out of licensing requirement.

Twenty central government services are linked to the eBiz portal — mandated to function as a single-window portal for clear-

"The Modi government's program is a rehash of the Singh government's 2011 manufacturing policy"

-ANAND SHARMA

Former commerce minister and senior Congress leader

ances from various government agencies.

The FDI regime too has been liberalized. For instance, FDI in the defense industry is permitted through the government route up to 49 percent. Higher FDI can be allowed on a case-by-case basis. FDI in construction, and operation and maintenance of identified railway transport infrastructure up to 100 percent is permitted through the automatic route. FDI in the insurance sector has been raised from 26 to 49 percent. The norms for FDI in real estate projects have been further liberalized. FDI up to 100 percent under the automatic route both for green field and brown field projects for manufacturing of defined medical devices has been allowed.

Commerce ministry officials say that the 25-30 cabinet notes resulting in such farreaching changes in the last few months showed that the Narendra Modi government worked at a speed unheard of in this country. The campaign has its other arms too — "Skill India," "Digital India," and "Smart Cities Mission" are all part of the groundwork to get Make in India ticking.

Make in India 2.0

In the second year of its existence, the Make in India program moved from setting up a liberal regulatory regime to launching actual measures and removing glitches that slowed the pace of growth.

For instance, the Prime Minister's Office recently asked the skill ministry to open 7,000 new industrial training institutes (ITIs) — half the total number of ITIs opened across the country since independence — in the next year.

"Startup India" was meant to be another slogan to provide a boost to startups with a new venture fund and easier registration norms. Modi realized the potential of this ecosystem early on. In the U.S., 70 percent of jobs are being created by startups, and as many as 30 percent of startups in the U.S. are promoted and created by Indians. According to NASSCOM, 72 percent of founders in India are less than 35 years old,





"Modi's new thrust on 'Make in India' is consistent with the erstwhile Planning Commission's similar proposal"

—ARUN MAIRA

Former member of the Planning Commission

making the country the world's youngest "startup" nation.

Indian startups have raised some pretty impressive funds in 2015. Paytm raised US\$805 million, Flipkart US\$700 million, Snapdeal US\$500 million, and Grofers US\$168 million. The e-commerce industry, driven largely by startups, is expected to raise US\$38 billion in 2016 — a jump of 67 percent over the last year — and 65 percent of total sales would be generated by mobile devices and tablets.

The challenge now, as Department of Industrial Policy and Promotion (DIPP) secretary Amitabh Kant says, is to become the "most disruptive nation" in the world. There is little denying that something is working. India jumped 12 places on the ease of doing business 2016 index, released annually by the World Bank.

Significantly, the movement is now getting a boost from various Indian states wanting to compete as business destinations; and they are adding local flavor to the central campaign. For instance, Andhra Pradesh wants to be known for its "Make in Andhra" expertise.

The central government is in sync and sees the need for a clutch of leader states powering India to a double-digit growth. States like Andhra Pradesh, Karnataka, Maharashtra, Gujarat, Jharkhand, Madhya Pradesh, and Chhattisgarh are typically positioned to become manufacturing hubs in their own right. A good example is Maharashtra holding a Make in India week in Mumbai that saw participation from over 60 countries and over 1,000 companies.

Performance so far

The renewed thrust has yielded some dividends on the ground too. Minister of Commerce and Industry Nirmala Sitharaman recently announced that the FDI inflow in India is growing at 48 percent when globally there is a fall of 16 percent.



One must mention that global infractions in oil and other commodities have deeply dented commodity exporters such as Brazil and South Africa as investment destinations, making India's case stronger.

Make in India has proportionately benefited with a record FDI inflow growth of 114 percent in December last year, and seven of the top ten sectors receiving FDI relate to manufacturing. RBI data on FDI inflow show that the country received as much as US\$63 billion till November 2015, 21 percent higher than the FDI inflow in the previous 15 months.

"FDI will grow by 40 to 45 percent in 2016 despite the global slowdown, largely owing to the number of policy measures taken by the government," says DIPP secretary Amitabh Kant.

Whether it was international agencies or rating agencies or even Ivy League institutions, there was consensus that India is a happening country. It is first among the world's fastest growing economies; it is also the first choice for tech companies to set up research and development facilities outside their homes. Among the BRICS nations, it's only India that is shining. India moved up 16 places on the World Competitive Index 2015-16.

According to the commerce ministry, over 17,000 investor queries have been made through the Make in India portal, quite a feat in this depressing global environment.

Among major commitments, Foxconn expressed its intention to invest US\$5 billion in India. Other significant commitments were made by Xiaomi, Cisco, LG, BrightSKY, Philips, Thomson, Samsung, LG, Flextronics, and Quanta.

In the first major FDI in rail projects after the limit was raised, General Electric and Alstom bagged a US\$5.6 billion contract from the Railways to build locomotives in the country. Defense ministry officials say that they have a highly ambitious target to achieve a level of 70 percent indigenization by 2027.

A number of companies including majors such as Dassault, Boeing, and Airbus have announced major plans. Dassault Aviation bagged an order for 36 Rafale fighter aircraft. Pipavav Defence announced its intention to develop India's first "smart city" for the defense sector at an estimated cost of US\$1 billion in Maharashtra.

Airbus has announced restructuring of its organization in India and said that Airbus exports will reach US\$2 billion from India. Boeing has entered into a joint venture with Tata Advanced Systems and the partners formally announced that a center to manufacture aero structures for AH-64 Apache helicopters will be developed in Hyderabad.

In the retail space, IKEA announced its plan to open 25 stores across India, entail-

"If jobs don't increase commensurate with the growing numbers of the working population, there could be unrest"

—SUMIT MAZUMDER President, Confederation of **Indian Industry**

ing an outlay of US\$1.8 billion. Other developments included entry and expansion by global majors such as GAP (which opened its flagship store in Delhi in May 2015, and currently has four stores); the H&M group, which plans to invest US\$10 million in India, announced 50 single-brand retail outlets across India in the next few years; and Walmart India, a wholly owned subsidiary of Walmart Stores Inc., plans to open 500 stores in India in the next 10 to 15 years.

The retail sector accounts for over 10 percent of the country's GDP and around eight percent of employment.

In the automobile sector, capacity expansion announcements were made by Bajaj Auto, MRF, Apollo Tyres, Volvo India (which also uses its plant as an export hub for buses), TVS, and Amara Raja; R&D centers by Ford and Piaggio; greenfield projects by Fiat (JV with Tata), CEAT, Daimler-Benz, International Tractors, and increased localization by Mercedes-Benz and BMW. Though the slowdown in the auto industry is a matter of concern, these initiatives are significant considering that the sector accounts for seven percent of India's GDP, and provides 19 million jobs.

Clean energy, on the other hand, is expected to yield business worth US\$160 billion in India in the next five years. Significant announcements included Softbank, Foxconn, and Bharti Enterprises pledging to invest about US\$20 billion in solar projects in India. Several private companies including the Welspun Group, Adani Enterprises, and the Essel Group have begun building large new solar plants, while Reliance Power has commissioned the largest solar plant in the world, with a 100 MW capacity in Rajasthan. Mytrah has plans to invest around US\$400 million next year while Gamesa has plans to invest close to US\$220 million over the next two years.

All is not hunky dory

There is the other side too. The Congressled Opposition has mounted a major attack on the government, claiming the Make in

India campaign is designed purely to aid a bunch of crony capitalists and ignores the wider issues the nation faces. Congress vice-president Rahul Gandhi says that the program in its present form has neglected "the smaller and medium enterprises, with the focus on a handful of big corporations."

Former commerce minister and senior Congress leader Anand Sharma alleges that the Modi government's program was a rehash of the Manmohan Singh government's 2011 manufacturing policy.

Former Planning Commission member Abhijit Sen wonders whether the Make in India program was working on the ground, and says that its template and slogan could be changed to market India as a better destination for profits "because other places including China are not that attractive now."

Internally, BJP ministers have been blaming the bureaucracy for both indifference and sabotage. Union minister Nitin Gadkari says the bureaucracy's attitude was the biggest hurdle in infrastructure expansion. Maira agrees that the bureaucracy has to be sensitized on further facilitating ease of doing business, particularly in states.

Government expenditure on R&D remains a paltry 0.8 percent of GDP, and CII's Mazumder agrees that this needs urgent attention. A joint report of the Boston Consulting Group and CII recently said that the target of creating 100 million jobs and achieving 25 percent of GDP from manufacturing by 2022 may be difficult, going by the performance of the manufacturing sector in the past few months.

Perhaps the biggest challenge is the slowdown in industrial activity marked by poor corporate third quarter results and the lack of orders from global markets now teetering on the verge of recession. Companies hit by poor demand are in a mode of consolidation and lowering risks in preference to investment and expansion. Many of the companies that had shown profits were those that had benefitted from lower energy costs rather than expansion of sales. Backbone sectors like steel took the biggest

"FDI inflow in India is growing at 48 percent when globally there is a decline of 16 percent"

-NIRMALA SITHARAMAN Union Minister of State for Commerce and Industry

hit. Tata Steel booked a third quarter loss of US\$320 million in the face of dumping by Chinese companies while Korean giant Posco, which once planned to invest US\$12 billion in India, has virtually withdrawn from the country.

RBI's recent February report on the economy noted that in the first two months of the December quarter, industrial activity slowed in relation to the preceding quarter. This reflected weak investment demand with deceleration of capital goods production. Stalled projects continue to remain high, and there is a decline in new investment initiatives.

These challenges notwithstanding, the new manufacturing opportunities may be India's chance to cement its position as the only bright spot in the global economy. As Mazumder puts it, "With the possible exception of Singapore, no nation has become an advanced nation without riding a manufacturing wave."



Brazilian Business



NEST OF STARTUPS

Large companies are establishing support hubs for new businesses aiming at continuous innovation; and more than ever, that is what Brazil needs.

By Daniela Rocha

Less than two decades before becoming a tech giant with an annual revenue of US\$70 billion and almost 54,000 employees, Google took its first steps at a makeshift office in the garage of a house in Menlo Park, California. Back then, there were only three people working there: its two founders (Larry Page and Sergey Brin) and one employee. Years later, when recalling the first days of the company,

Page — by now, a billionaire — said, "You don't need a 100-person company to develop an idea." This is the spirit surrounding Google Campus, a physical space set up by the company to encourage start-





ups around the world. Google Campus is already in operation in London, Tel Aviv, Seoul, Madrid, and Warsaw, and it's getting ready to open its sixth entrepreneurs support hub in São Paulo.

The center, located in a 6-story building in the Paraíso neighborhood, has no opening date yet but should host from 30 to 40 resident startups that will receive infrastructure and support for their businesses. This is not the first initiative of its kind in Brazil. Telefônica, the telephone carrier; Samsung, the electronics manufacturer; and Itaú bank are some of the large companies that have created startups centers to follow closely how this world works.

Their aim is to support entrepreneurship and of course enjoy benefits in the form of new businesses. It is great news — and the result of private initiative — especially in a country devastated both politically and economically.

By creating centers to encourage small entrepreneurs, big companies seem to seek, above all, the new ideas that startups can provide. When a company grows a lot, it may become difficult to diversify businesses. Innovation becomes more complex since there may be many bureaucratic and administrative steps such as reports and approvals required from different departments. For this reason, some companies started seeing startups which are leaner and more agile - as options to constantly feed innovation.

"It's been proven that most part of innovations today take place outside corporations," says Renato Valente, executive in charge of Wayra, one of the pioneering corporate accelerators in the country, sponsored by Telefônica. The group has accelerator units in nine other countries, among them China, Chile, and Mexico. In



STARTUP CENTERS IN BRAZIL

| Startup | Sponsor | Start of activities | What it does |
|--------------|--|---------------------|---|
| Wayra | Telefônica Group | 2012 | An accelerator of digital startups offering mentorship and financial assistance |
| Oxigênio | Porto Seguro | 2015 | This startups accelerator offers workshops and advisory services. It provides US\$50,000 in resources and US\$100,000 in indirect help |
| Inove Senior | Senior | 2014 | It offers training, co-working space, and monthly financial assistance of US\$2,200 for each startup chosen |
| Cubo | Itaú Unibanco and Redpoint e.Ventures | 2015 | A tech entrepreneurial hub that offers co-working space and tries to connect companies, investors, and universities |
| Ocean | Samsung | 2014 | Center for technological capacity building offering training and programs to help turn good ideas into startups |

IT'S BEEN PROVEN THAT MOST PART OF INNOVATIONS TODAY TAKE PLACE OUTSIDE CORPORATIONS. —Renato Valente, Wayra

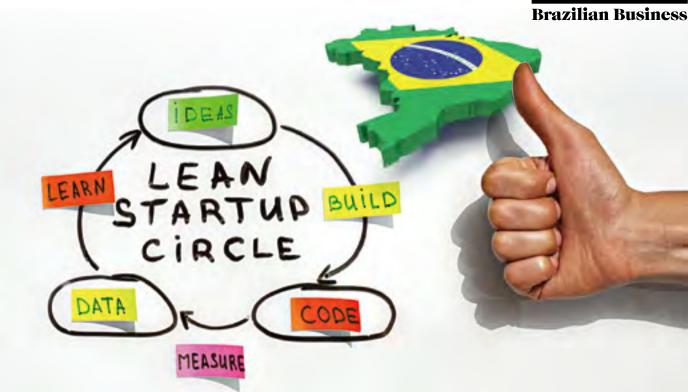
Brazil, in a bit more than three years, US\$1.6 million have been invested in 54 tech companies.

Eight of them have been incorporated by Vivo's portfolio of product and services. One of them is the startup Dujour, which created an app where people can share pictures of the clothes and accessories they are wearing. Dujour has 250,000 users and signed a contract with Vivo setting a subscription service with exclusive content by fashion bloggers and offering discounts when shopping for clothes.

If large companies aim at finding new niches of businesses, the entrepreneurs, in turn, benefit from having access to shared work spaces, mentoring, courses, and in some cases funds to accelerate their projects. In São Paulo, the insurance company Porto Seguro opened Oxigênio Aceleradora last year in the Campos Elíseos neighborhood, a space initially housing five startups. The startup creators receive a direct contribution of US\$50,000 plus US\$100,000 in infrastructure and technology. The program lasts six months, the first three in São Paulo and the last three in Silicon Valley, borne by American accelerator Plug and Play, their partner in this initiative. "We seek innovating solutions that add a different aspect to Porto Seguro products," explains Italo Flammia, Officer at Oxigênio.

When encouraging startups, some companies may favor businesses in their own field. This is the case with Samsung, which sponsors two hubs of technology development and training called Samsung Ocean:





one in São Paulo and another one in Manaus. The company chooses small groups of four or five people who want to create a startup. The chosen teams spend five months in training. "The aim is to turn ideas into functional prototypes," says Eduardo Conejo, Coordinator at Ocean. "I see many apps and games that have been developed at Ocean in the market."

If Samsung wants to create new products in their own field, Itaú bank has a different strategy. Last September, in a partnership with the American investment fund Redpoint e. Ventures, Itaú opened Cubo, a center to foster tech businesses.

The co-working space is located in Vila Olímpia, São Paulo. "More than 500 companies have signed up and we already have 45 startups," says Erica Jannini, IT Management Supervisor at Itaú. Of all the startups located in the 5,000-square-meter building, only six operate in the financial sector. The others work with education, information technology, and e-commerce.

São Paulo is the city where you see most startups nests of large corporations emerging. And it is easy to understand why. A study conducted by Endeavor, an

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international organization for promoting entrepreneurship, showed that the state capital is the best city to be an entrepreneur in Brazil. São Paulo ranked first in the main ranking because it stood out in three aspects: market size, access to capital, and infrastructure.

But we can find such initiatives in other places as well. Last year, in Florianópolis, Senior — one of the largest Brazilian developers of management software - established Inove Senior, a space to be used by the companies selected at their accelerating program. From the 250 projects submitted in the first phase, 10 were chosen and enjoyed nine months of mentoring. "The results were very positive. Three

companies became Senior business units," says Alencar Berwanger, in charge of Inove Senior. Last July, in Niterói, the Italian electrical company Enel launched Energy Start, the first accelerator program for energy startups in Latin America. Four companies now share an office in downtown Niterói. "We have to get ready for the changes in the energy market such as the ones brought by the use of smart meters," explains Marcelo Llévenes, CEO of Enel.

The spread of startups support hubs is a sign entrepreneurship is maturing in Brazil. This topic is increasingly discussed at universities and there is a growing number of incubators and accelerators. In addition to that, there are investors willing to bet in good initiatives.

If Brazil still seems far from providing for the birth of a giant such as Google, at least the country has conditions to enable phenomenon cases like Waze to appear, a traffic mobile app.

Waze started with the support of the Tel Aviv Google Campus. It was successful and bought by Google itself, in 2013, for over US\$1 billion. Let's hope this case inspires Brazilian startups.