

## The Panama Canal

### A plan to unlock prosperity

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Ten years ago this month Panama took possession of the canal that bears its name. It has high hopes for a \$5.25 billion expansion of the waterway

Bloomberg



CAPTAIN HARIDAS PILLAY looks down anxiously from the bridge. He brings his ship through here every month, but it is always a tense, careful manoeuvre. The *MV Perseus Leader* inches into the Miraflores lock on the Panama Canal on her way from the Pacific Ocean to the Caribbean Sea and the Atlantic, 80km (50 miles) away, a tug astern braking her bulky progress into the narrow gap. She is like a floating multi-storey car park, a roll-on roll-off car carrier. Today she has 3,300 Subarus and Mazdas from Tokyo and Hiroshima, bound for Baltimore and New York.

The master relays orders from the Panama Canal Authority (ACP) pilot to the helmsman as the vessel eases into the lock under her own power. With barely half a metre to spare to both port and starboard, she is roped to four "mules", or electric locomotives, fore and aft to stop her bumping against the sides. "It's like directing a small orchestra," says Captain Pillay. Gates close, water rises, gates open; then close, up, open again. After about 30 minutes the ship is ready to steam into the wider waters of the canal. The atmosphere on the bridge relaxes, and cups of coffee appear.

The Panamanian isthmus was too high and rocky for the original French and later American builders to clear a sea-level passage like the Suez Canal, so ships have to be lifted 26 metres (85 feet) from the Pacific to enter the lake midway through the canal, and lowered again on the Atlantic side. The French gave up after tropical diseases, chiefly yellow fever, wiped out thousands of labourers. The American Army Corps of Engineers managed to control the spread of disease among contract labourers, of whom almost 20,000 came from Barbados; they built a railway, imported giant steam shovels and moved mountains to complete an engineering wonder of the world. The first ships passed through in 1914. The descendants of many workers live today on the Atlantic coast in cities such as Colón and still speak English.

As well as providing a short cut for battleships, the canal became a vital artery of world trade. Since the 1970s, however, merchant vessels have been growing too big to pass through it. The largest container ships today can carry more than 12,000 boxes, whereas the biggest that can fit in the canal carry only 4,500. Since the mid-1990s it has become obvious that the bottleneck would need to be cleared, or the canal would become a backwater.

In September 2007, even as the world economy slid into recession and global trade fell for the first time in a quarter of a century, the ACP started digging. The work consists mainly of dredging the existing canal and blasting an access channel to a new set of larger locks. The channel will be parallel to the existing Miraflores

lake, but nine metres higher. Basalt from the excavation will be used to make concrete to build the locks. Construction of these, in what is now a marshy lagoon on the Pacific side, should start in a few months. About 150m cubic metres will be excavated, compared with 200m for the original canal.

Last July the ACP awarded the contract to build the locks: 60% wider and 40% longer, they will be able to handle all but eight of the world's container vessels, along with supersize tankers and bulk carriers of ores and grains. An international consortium led by Spain's Sacyr Vallehermoso won the contract, thanks partly to its innovative rolling lock gates which slide into a side chamber, allowing easier maintenance on the most delicate part of the locks. This is a trophy deal for Sacyr, and relief from problems in its home market.

The whole project should be finished in 2014 at a cost of \$5.25 billion, more than a fifth of Panama's GDP last year. Of this, \$3 billion will come from retained earnings, the rest from bilateral and multilateral lenders, led by the Japan Bank for International Cooperation, the European Investment Bank and the Inter-American Development Bank. According to the ACP, the project is on time and within budget.

The expansion—one of the world's biggest transport projects—was controversial when first mooted in around 2001. Some feared that it would cripple a small country whose public debt then amounted to 71% of GDP, and that extra dams would flood rural land, displacing peasants and threatening water supplies. Others argued for a giant port on the Pacific side with containers crossing the isthmus by rail. Yet Panamanians voted heavily in favour of expansion in a referendum in 2006 after concessions to soften the environmental impact: there will be no extra dam and the new locks will recycle most water.



Panama took over the canal ten years ago this month under a treaty signed in 1977 by Jimmy Carter, then America's president. The Americans ran it as a federal agency, setting tolls to cover costs. The Panamanians' approach was more commercial. The ACP, a state-owned autonomous agency, segmented the market, adapted tolls to different cargoes and charged more for additional services, such as extra tugs and deckhands. Transit times became shorter and more predictable, attracting container lines. In 1995, 200,000 containers went through; this year's number is 4.6m. The canal's share of traffic between East Asia and America's East Coast has risen from 11% to 40%, according to Alberto Alemán Zubieta, the ACP's chief executive.

The ACP has also been able to charge more. Since 1998 the average toll has risen by 70%. In May, for example, the price per container went up from \$63 to \$72. (Container ships are usually charged by capacity, regardless of load. Cruise liners pay \$120 per berth.) The canal has revenues of \$2 billion and costs of only \$600m. Spare cash goes into the Panamanian treasury, through a revenue royalty and dividends. In the fiscal year that ended in September, the treasury pocketed \$760m.

Improved service is one justification for the increased tolls. Joe Reeder, the last chairman of the canal authority under American control, thinks the Panamanians have done a great job. "They have got the total transit time down below 24 hours," he says. "We never managed better than 27 or 28 hours." This has been done even as the number of transits has risen from 13,000 a year to over 14,000. Most are done by a hard core of 300 container ships and specialised vessels like Captain Pillay's passing through regularly between America's East Coast and China.

Although it has some power in the market, the ACP is no monopolist, able to hold the world's shipping lines to ransom. Rodolfo Sabonge, its head of marketing, notes that there are alternatives to the short cut between the Atlantic and the Pacific. The big market for container ships is East Asia (largely China) to the East Coast, with access to the bulk of America's population. Shanghai to New York via the Panama Canal works out at roughly 25-26 days, compared with 27-28 days via Suez or 19-21 via Los Angeles and train. The route via the West Coast and overland costs about \$600 per container more than Panama, depending on a ship's operating costs, which are of the order of \$60,000 a day.

The bosses of the world's shipping firms, who sit on the ACP's advisory board, started pressing for expansion as soon as Panama took over. "Hardly anybody is building smaller container ships now," says Jürgen Harling,

group vice-president of A.P. Moller-Maersk of Denmark, the world's biggest container-shipping line. "With big vessels you need fewer of them, say, five to run a regular service from China to [America's] West Coast, compared with eight or nine to run a similar service through the canal at its present size." Laurent Falguière, a vice-president of France's CMA CGM, the world's third-largest container-shipping line, emphasises the flexibility a wider canal will provide, along with the upgraded ports and terminals planned on America's Gulf and East Coasts. He says the project will "bring a breath of fresh air", altering the relative merits of the different transpacific or Atlantic routes.

Not all shipping analysts are enthusiastic. Martin Stopford, a director of Clarksons, a London shipping consultancy, and author of a standard work on maritime economics, sees some limits to the benefits, since economies of scale diminish for container ships above 6,500 TEUs (20-foot equivalent units—the measure for containers). He also notes that East Coast ports are not yet big or deep enough to handle giant container vessels. "Nevertheless," he says, echoing "Field of Dreams", a film about baseball, "if they build it, they will come."

Mark Page of Drewry, another London firm of shipping consultants, turns Mr Stopford's argument on its head. "If they don't build," he says, "they will go." Mr Page thinks the canal would have faced marginalisation had it not started expanding. In 2000, he calculates, 85% of the container fleet could still pass through Panama. But bigger ships caught on fast from the mid-1990s. By 2007 barely 57% of container ships could fit the canal. "By 2011 it will be less than half." He thinks, though, that the expansion will not make much difference for many kinds of trades, such as bulk ores and grains, oil tankers or specialised refrigerator or chemical carrier ships. "It's all about containers," he concludes.



Reuters

Digging for commerce

The ACP forecasts that, thanks to the expansion, total tonnage will rise from 280m tonnes in 2005 (its base year) to 510m in 2025. Container traffic should triple to about 300m tonnes. The ACP is also counting on a continued rise in its share of traffic between East Asia and the East Coast to about half, at the expense of America's West Coast ports and railways. No fewer than 140 shipping routes (counted port-to-port) already run via Panama: the ability to take bigger vessels could add even more, especially between eastern South America and Asia, and western South America and the American East Coast and Europe. Brazilian soya and iron ore and Colombian coal in big bulk carriers may soon have better access to China, which might in turn affect commodity prices.

Mr Alemán also reckons expansion boosts Panama's status as a regional hub: "It is a big port on two oceans," he says. He sees more big ships coming in to offload cargoes for trans-shipment in smaller vessels on either ocean—an example of the flexibility that shipping lines want. Dell and HP, two big computer-makers, and Caterpillar, a leading manufacturer of construction machinery, already have distribution centres in Panama in anticipation.

## Spilling over

The ACP believes that the expansion, once completed, will boost Panama's annual growth rate by 1.2 percentage points, helping GDP grow to 2.5 times the 2005 level by 2025. That, estimates the authority, would lift 100,000 Panamanians out of poverty: today 1m are poor in a population of 3.4m. But the mechanism by which a wider canal will raise the living standards of the country's people—particularly its least fortunate—remains murky.

Panama's economy is not a coherent whole. In recent years its growth rate, thanks largely to the canal and the activity associated with it, has been the highest in Latin America: 7%-plus in 2004 and 2005, 8.5% in 2006, 12.1% in 2007 and 10.7% last year. Residents proudly call the narrow strip of prosperity along the canal a Latin American Singapore. Panama boasts the world's biggest shipping registry, which means business for lawyers and boat-servicing companies. Its privatised ports move containers with world-class efficiency, and its airport has become an important hub for travel between North and South America. The high number of optical fibres passing through its territory gives Panama the best connectivity in Latin America, making it attractive for call centres and regional headquarters.

At the Atlantic end of the canal lies the Colón Free Zone, the world's second-biggest re-export centre, trailing Hong Kong. Last year \$9.1 billion-worth of merchandise was unloaded there; re-exports, after relabelling, repackaging and so forth, amounted to \$9.7 billion. At the Pacific terminus, Panama City is home to dozens of banks, serving Colombians and Venezuelans with dollar savings as well as Central Americans, and thousands of companies, attracted by its favourable tax treatment of offshore business. Despite the global recession, the skyline continues to sprout apartment towers of dizzying heights.

Yet this stretch of Singapore bisects an isthmus that is otherwise barely distinguishable from Nicaragua, a few

hundred kilometres to the north-west. Few low-skilled jobs are available besides those on building sites in Panama City. As a result virtually all formal non-farm jobs are in the former canal zone. The rest of the labour force—including most of the country's poor—works in agriculture, which is highly protected and inefficient. The water that fills the canal's locks flows from nearby rivers where the children of indigenous peasants swim naked during school hours. Panama's income distribution is among the least equal in the world.

Proponents of the canal expansion outline three ways in which it will benefit the country. The first is already being felt: the direct economic jolt of the construction itself, which has created 5,000 jobs and boosted GDP by 3.5% this year. This fortuitous Keynesian kick-start has kept the economy growing in 2009—in a region where many have shrunk.

Second, the proponents expect, will be a new wave of investment in the cluster of industries near the canal. Together, they make up 28% of GDP and are far more labour-intensive than the ACP itself, which has a lean payroll of just 9,500. A wider canal will also be able to handle larger cruise ships, making them more likely to choose Panama as their home port. Cruising could bolster tourism, Panama's largest source of export income from services after the canal. The Miraflores locks already have a visitor centre with stadium-style seating to watch boats being raised and lowered. It has hosted wedding receptions and even a Miss Universe contest. The sliding gates and water-saving basins of the new locks may attract even more visitors.

The third stream of benefits is the extra revenue flowing into the treasury. The ACP expects its annual transfers to the state to triple between 2005 and 2015 and perhaps to rise eightfold, to over \$4 billion, by 2025. This predicted windfall offers Panama the best chance to escape the economic woes that have stymied much of Central America for centuries. But as any oil-producing developing country can attest, such profits can create problems as well as solve them.

They could even exacerbate some flaws in the economy. Because Panama is short of skilled labour, many of the jobs created by further growth of the canal cluster would have to be filled by foreigners. "We have to make sure that the canal doesn't become Panama's oil," says Nicolás Barletta, a former president. "We can't let it subsidise the rest of the economy."

## A man, a plan, a canal, Panama

It is too much to expect even such a huge project to solve all a country's economic troubles. It will bring jobs in ancillary services; and the extra money could, if used wisely, ease some pressing problems. Most people think that economic diversification is the best way to reduce poverty. Panama's new president, Ricardo Martinelli, a supermarket magnate who was elected in May, has hired McKinsey, a firm of consultants, to design a national development plan. It is due to be released this month.

Bloomberg



Contained enthusiasm

Given that so many poor people work in farming, improving productivity there is most important. This means bringing techniques, equipment and seeds up to global standards, and cultivating Panama's most promising crops, such as bananas and coffee (its Geisha bean is especially prized). In particular, Panama is short of refrigeration capacity to preserve its produce.

On top of this, social services, primarily health care and education, also need improvement. Although Panama's social spending per person is among the highest in Latin America, its students' standardised test results rank near the bottom. Both Mr Martinelli's ministers and independent analysts attribute this disappointing showing to a powerful teachers' union and an inefficient civil service.

The government could use its extra income to foster rural development in any number of ways. It could also build more schools, universities, clinics and hospitals, or hire more or better teachers or doctors.

But money is only part of the equation. If the public sector is inefficient and prone to graft, as Panama's

is—the country ranks joint 84th cleanest out of 180 in Transparency International's index of perceptions of corruption—the cash may be wasted or end up in the wrong hands. Moreover, canal profits may blunt the incentive to spruce up a tax system that collects a paltry 11% of GDP. Countries with bountiful natural resources have often been poorly governed because leaders who do not rely on tax revenues are not held to account by the public, and are thus free to misbehave.

It is precisely in public administration that the canal may make its greatest contribution. Although the ACP is an arm of the government, it is run autonomously and professionally. It issues debt independently of the treasury (and, implicitly, has a higher credit rating). "I thought the canal should have been privatised, but I was wrong," says Felipe Chapman, an economist in Panama City. "It's a public company with the efficiency of a private one. The canal broke the taboo that Panamanians couldn't run things. We've run it even better than the Americans did."

For the world's shipping industry, the expansion of the canal will be an event almost as big as its opening a century before. Panama is better placed to reap the benefits. The public employees of the ACP have shown they can earn money honestly and effectively. If the state's other servants follow their example in spending it, the rising waters of the newly expanded canal may truly lift all Panamanian boats.

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