Impact of liberalisation on public safety in the transport, water and health care sectors

by

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The Public Services International Research Unit (PSIRU) investigates the impact of privatisation and liberalisation on public services, with a specific focus on water, energy, waste management, health and social care sectors. Other research topics include the function and structure of public services, the strategies of multinational companies and influence of international finance institutions on public services. PSIRU is based in the Business Faculty, University of Greenwich, London, UK. Researchers:
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1. Introduction

The loss of 304 lives in the sinking of the *MV Sewol* 14 April 2014, was South Korea's second worst maritime disaster in its history, and the worst in nearly half a century. This was made all the more tragic by the fact that most of those killed were secondary school students.

The immediate cause of the sinking was a sudden and extreme turn to starboard, causing cargo to shift and making the ship unmanageable. However, investigations into why such drastic manoeuvres were undertaken have revealed a litany of safety failures on behalf of the company, *Chonghaejin Marine*, inspectors and regulators.

Mark Dickinson, general secretary of Nautilus, the international union for maritime professionals, summarised the failings: "Issues including training, experience, safety management, ship design and construction, and the effectiveness of the regulatory regime are all critical factors in this disaster…" [1]

The Korean Confederation of Trade Unions (2014) has drawn attention to the role played by the deregulation of the transport sector: "Safety experts are now pointing to excessive deregulations, privatisation of public transport and emergency services, the use of precarious work arrangements and the corrupt appointment of officials in oversight agencies as causes of the Sewol tragedy." [2]

This report will examine the complex linkages between liberalisation and public safety in transport. From this preliminary investigation, there does not appear to be a universally applicable causal linkage running directly from liberalisation to a deterioration in public safety. However, from a range of case studies, which examine the transport, water and health sectors as well as deaths of workers and members of the public in contracts operated by Serco, what emerges is that the way in which liberalisation is carried out is critical for safety outcomes. The careful construction of a safety culture built up through learning from decades of experience can be swept aside by ill-conceived policy reforms. Increased competitive pressures can lead to a prioritisation of performance and the bottom line over more abstract concerns over public safety. Corruption can play a key role. Institutional realities may mean that a newly liberalised transport sector is subject to new or increasingly corrupt practices.

2. Context and key issues in transport

International pressure for the liberalisation[3] of transport through the General Agreements on Trade in Services (GATS) stalled during the Doha round of trade talks. The US refusal to table an offer on maritime transport led to other OECD countries withdrawing their offers to further liberalise shipping services. [4] However, in the current negotiations over the Trade in Services Agreement (TiSA)[5], shipping and both air and road transport are on the list of services to be liberalised. At this time it is unclear exactly what offers are on the negotiating table.

Despite the failure to make progress in international negotiations, over the past quarter of a century many governments have pushed ahead with transport liberalisation either on their own or with the support or encouragement of international agencies. Much of the literature on liberalisation in transport examines the impact on the quality of service provision, affordability and working conditions. This report will focus specifically on the linkages between liberalisation and safety, with a focus on maritime and rail transport.

From the outset, it should be made clear that there is no 'smoking gun' in respect to liberalisation and safety. State ownership, particularly in states with low institutional capacity, by no means ensures that sufficient safety standards are upheld, as accidents with state-owned ferries, for example, make evident. On 26 September 2002, a Senegalese government-owned ferry, overcrowded, poorly maintained and sailing outside of its coastal limit, capsized with the loss of 1863 lives, the second-worst non-military disaster in maritime history. [6] Similarly, even the best regulations on paper will do little to prevent accidents if implementation and enforcement are lacking in practice.

In some cases, workers have concluded that safety has improved in the years following liberalisation. A survey of international railworkers conducted by the International Transport Workers' Federation (ITF) suggests that in most states the railway safety situation is improving, though in a number of countries, sub-contracting and outsourcing are still creating serious concerns for safety. [7]
Statistics on casualties, incidents or reported safety violations, examining pre- and post-liberalisation periods, are hard to come by. However, even if such systematic quantitative analyses were available, the direct implications of liberalisation for safety are complicated by dynamic changes in service usage, technology and broader economic conditions.

However, what does become clear from an examination of the experience of a number of cases of transport liberalisation is that a previously established effective safety culture can be broken. Moreover, liberalisation does not by itself ensure that such a culture is (re-)built. Indeed there are a number of recurrent concerns which suggest that, at least in the initial years following regime change, liberalisation can have detrimental impacts on safety.

Liberalisation has often meant the removal of state subsidies. Indeed this has been either the explicit or the tacit objective of the process for debt-burdened governments. Decisions over whether or not subsidies are appropriate, how they are allocated, and who should benefit from their payment, are critical issues of public interest. Certainly their removal subjects transport services to an intensification of competitive pressures. These pressures can lead to a de-prioritisation of safety. This can be exacerbated where new ownership/ management does not come from a safety culture or hold an explicit commitment to safety in the form of well-designed and well-implemented safety systems.

Where government institutions are insufficiently strong to independently regulate and discipline private providers, liberalisation can encourage rather than discourage corrupt practices. Privatisation and deregulation require closer collaboration between public sector officials and private providers, opening up the opportunity for the spread of corrupt practices. The diffusion of responsibility between newly private providers and regulators can cause confusion and delays in needed maintenance and disciplinary procedures.

In the maritime transport sector, where for much of contemporary history services have been provided by the private sector, the critical regulatory issue has involved a process known as 'flagging out'. This involves registering vessels under so-called 'flags of convenience' in countries such as Liberia, Panama and island states such as the Marshall Islands. Interestingly, in many countries, ferry services were held under public ownership longest out of higher general awareness of the public interest concerns at stake[8].

The first step towards this new liberalised arrangement was taken by US and Greek shipbuilders 'flagging out' in the post-war period in an attempt to avoid domestic shipbuilding costs, levels of taxation and seafarers' wage rates. [9]

However, competitive pressures soon forced Japanese and European ships to follow suit, 'flagging out' from the mid 1970s, and allowing the evasion of national collective bargaining agreements. The use of flags of convenience is now ubiquitous across the shipping industry.

The issue of the flag of ownership is of crucial importance to safety. The flag state determines requirements in terms of: manning levels, training, hours worked, and qualifications; and inspection, ship classification, and standard of safety equipment, amongst other factors. Once host state entry requirements had become a source of competitive advantage, this initiated the practice of ship owners 'shopping around' for the lowest cost crews, classification societies, surveyors/auditors, etc.. As the subsequent case studies will reveal, this explains many of the 'contributory factors' which are ascribed to maritime accidents: insufficient numbers or improperly trained staff, seafarer fatigue[10], inadequate inspections and investment in maintenance, and failing safety systems and equipment.

In the rail sector, what was traditionally felt to be a natural monopoly has been held more tightly in public hands in most countries until recently. Privatisation and deregulation of what were national railways has led to the outsourcing of services and a fragmentation in systems management. In some cases this has led to a breakdown in both informal collective knowledge and formal information systems for tracking maintenance requirements, both of infrastructure and rolling stock. Whittingham (2004, 127) has described this process as the "dilution of knowledge" and the "loss of 'controlling mind'".[11]

With liberalisation and increased competitive pressures comes an incentive structure which focuses on meeting service requirements and shareholders' expectations for profitability over diffuse notions of public safety. This de-prioritisation of safety is reinforced where top management are introduced who do not have railway experience, and do not bring with them a safety culture.

Taylor and Sloman (2012, 17) argue that financial pressures coming in the wake of the privatisation of the UK rail system were intense: "Key reasons for the increase in costs include higher interest payments in order to keep Network Rail's debts off the government balance sheet; debt write-offs; costs arising as a result of fragmentation of the rail system into many organisations; profit margins of complex tiers of contractors and sub-contractors; and dividend payments to private investors."[12] In such an environment, it is hardly surprising that cutbacks lead to a shortage of staff, rising turnover, and training failures [13]
as well as reduced investment in both routine maintenance and fixed assets. These changes, as will be seen, can have fatal consequences.

3. Sectoral case studies

3.1 Maritime transport

UK: *The Herald of Free Enterprise*

In 1984, as part of its sweeping programme of privatisation of state-owned enterprises and deregulation, the Conservative government of Margaret Thatcher privatised the state ferry company, Sealink. This was done without putting in place a system to licence ferry operators in order to ensure the maintenance of minimum safety standards. Instead, operators were left to design their own safety systems.

On 6 March 1987, just minutes after leaving the Belgian port of Zeebrugge, the passenger and car ferry, the *Herald of Free Enterprise*, capsized taking 193 lives. The ferry was owned by UK company P&O (then Townsend Thoresen), but registered in Saint Vincent.

The direct cause of the accident was the failure to close the bow doors of the roll-on roll-off (Ro-Ro) ferry. The subsequent inquiry found that overwork played a contributory factor in causing the exhausted seafarer whose responsibility it was to close the bow doors to oversleep.[14] More importantly, there were no safety systems in place, either human or automated, to signal his failure to perform his duties to the rest of the crew. The cost of installation of automated warning systems was judged an unnecessary cost; though within months of the disaster such systems were in place across the company's fleet. Commercial pressures were taking priority over safety checks, and the crew was under pressure from management to ensure that the ship did not sail any later than scheduled. Safety concerns about overloading and the potential for water ingress had been expressed in numerous memorandum from ship Masters, but were ignored by management. [15]

The official enquiry highlighted serious management failures on the part of the operator:
"….a full investigation into the circumstances of the disaster leads inexorably to the conclusion that the underlying or cardinal faults lay higher up in the Company. The Board of Directors did not appreciate their responsibility for the safe management of their ships. … It was the failure to give clear instructions about the duties of the Officers on the Zeebrugge run which contributed so greatly to the cause of this disaster...All concerned in management, from the members of the Board of Directors down to the junior superintendents, were guilty of fault in that all must be regarded as sharing responsibility for the failure of management. From top to bottom the body corporate was infected with the disease of sloppiness … It reveals a staggering complacency…the 'Marine Department' [of the company] did not listen to the Complaints or suggestions or wishes of their [ships'] Masters." [16] The enquiry expressed hope that consideration would be given to a system for licencing the operators of passenger ferries.

An inquest jury found that the cause of death was "unlawful killing". The company was charged with 'corporate manslaughter', and some of its executives were also charged

with gross negligence and manslaughter, but neither the company nor the executives were convicted.

The UK law on corporate manslaughter was changed in 2007 - 20 years later! - following other disasters including rail crashes. The new law makes it easier to prosecute companies, but so far only 3 have been prosecuted and convicted.[17]

Norway: *Scandinavian Star*

Incidents in the early 1990s demonstrate the hazards associated with the deregulation of the industry which has led to companies scouring the globe for low-cost crews. Lane (1996, 87) argues that in such a situation of irregularly employed, overworked, international crews, it is difficult to establish that seafarers are properly certified or trained, let alone create a working social order onboard. [18]

In April 1990, the car and passenger ferry, the *Scandinavian Star*, was en route between Norway and Denmark, when she caught fire. Before the ship could be brought back to port and the fire extinguished, 159 people had lost their lives. While investigations over suspected arson are ongoing to this day [19] the inquiry found that a contributory factor was the inability of the crew to communicate with each other or with the passengers, and their lack of preparedness for emergency and evacuation procedures.

The ferry was Norwegian-owned but Bahamian-flagged. Most of the mixed nationality crew had only been taken on one week before the disaster. The inquiry found that Scandinavian officers were unable to communicate with Portuguese and Filipino crew members, and that safety notices on board were not in local languages. [20]

Egypt*: Al-Salam Boccaccio 98*

In February 2006, the *Al-Salam Boccaccio 98* Ro-Ro car and passenger ferry sank with 1034 lives lost. The ferry was carrying pilgrims returning from the Hajj from Saudi Arabia to Egypt. The subsequent investigation concluded that the cause of the disaster was a build-up of water in the hull of the ship after an attempt had been made to put out a fire in the engine room. [21]

The ferry, owned by Egyptian company *Al-Salam Maritime* was registered in Panama. This allowed the 35 year-old ferry to sail a 160 mile crossing in violation of Egyptian laws which prohibit ships over 20 years old from operating more than 20 miles from shore. [22] The investigation turned up a long list of failings, including inadequate inspection, poor crew training, a lack of safety equipment and improper design modifications that had been made to the ship to accommodate more passengers which increased instability.

Received wisdom is to blame these failings on corruption in both the Egyptian public and private sectors. The CEO of *Al-Salam Maritime* was an MP, chair of the sub-committee on maritime transportation, and a board member of the Red Sea Port Authority which had failed in its inspection duties. Soliman and Cable argue that this

corruption can be linked with neoliberal reform. Widespread deregulation of the industry had led to closer collaboration between state and corporate officials, and fostered secrecy about this collaboration in order to protect the state's legitimacy in the eyes of the public. [23]

Canada: *Queen of the North*

In March 2006, the *MV Queen of the North* ran aground and sank with the loss of two lives. The immediate cause was determined to be pilot error and unsafe watchkeeping practices. [24] While it may not have prevented her sinking, the ship's outdated single compartment design made her more vulnerable to hull breach. North Coast Member of the British Columbia Legislative Assembly Gary Coons had expressed fears in the month prior to the incident that privatisation had led to confusion between the provincial government and the private provider, BC Ferries. Negotiations had been drawn out over three new vessels which were to replace the ageing single compartment ships.[25]

UK: *Swanland* and the *Ernest Bevin*

In November 2011, the general cargo ship *Swanland* suffered a catastrophic structural failure and foundered en route from Wales to the Isle of Wight, with six crew killed.[26] The investigation cited a number of causes of the tragedy: the *Swanland* had not been approved to carry high-density cargoes[27] by its flag state or classification society; there was a lack of maintenance; surveys conducted on the ship lacked rigour; and the *Swanland*'s crew was inadequately trained in emergency procedures.

The ship was owned by UK-based *Swanland Shipping Ltd*, and operated by another UK firm *Torbulk Ltd*, but was registered in the Cook Islands. This was allowed even though the ship failed to meet Cook Island registry entry requirements. The owner had transferred the ship's classification society from Lloyd's Register to the International Naval Surveys Bureau in 2009, reducing the fees paid by about 30%. [28] This is a textbook example of a ship owner 'shopping around' to find savings on survey and audit fees, with the expectation of longer-term savings on the cost of required repairs. This should come as little surprise in an industry under intense financial pressure; the *Swanland* had been operating at a loss, and the firm has since been dissolved.

In its investigation of the *Swanland*, the UK Marine Accident Investigation Branch (MAIB) was at pains to point out that the tragedy was emblematic of a more general crisis in the industry. At the time of the *Swanland* report, some 248 general cargo ships had foundered between 2002 and 2011 with the loss of over 800 seafarers.

There was another tragedy on a ferry crossing the river Thames in London in August 2011, this one illustrating the risks associated with the latest form of government outsourcing to large generalised private service contractors that may lack the necessary safety experience. The Woolwich ferry, the *Ernest Bevin*, had been operated by municipal workers for over 120 years, but it was outsourced in 2008 to the private company *Serco*. A worker was dragged overboard and killed, and an official report concluded that, "A number of unseamanlike working practices were evident on board… The unmooring operation was a routine task but it had not been captured by the company's safety management system… Consequently no risk assessment for the operation had been conducted to assess and mitigate the hazards faced by the crew".[29]

3.2 Rail

UK

With the passage of the Railways Act of 1993, the Conservative government of John Major split state-owned British Rail into more than 100 businesses and sold them off. Twenty-five train operating companies (TOCs) were given contracts to run the services themselves. Ownership of track, signalling and stations and responsibility for their maintenance went to *Railtrack*. *Railtrack* outsourced this maintenance work to hundreds of private contractors, with responsibility falling upon the lowest-paid workers at the bottom who numbered 30% less than when the rail services had been under public control. The Office of the Rail Regulator was established to regulate the private provider's economic performance, while safety regulation remained the responsibility of the Health & Safety Executive, a public body.

Despite rapid increases in passenger numbers, track usage fees charged to TOCs were fixed, hitting Railtrack's profits. [30] Combined with the failure of the government to impose investment targets on Railtrack, the result was a maintenance backlog. This was further compounded when, due to maintenance problems, TOCs were allowed to pass their late service fines on to Railtrack. Mounting financial pressures led to maintenance cutbacks. Combined with the effects of the fragmentation of maintenance provision and the loss of a long history of organisational knowledge and overall oversight, accidents were waiting to happen.

In September 1997, at **Southall**, West London, a Great Western Trains passenger train collided with a freight train, killing seven and injuring 139.[31] The immediate cause of the accident was the driver of the passenger train passing a red signal. However, a number of further factors ensured that the driver's error would prove fatal. The inquiry found that the train had been operating with a defective Automatic Warning System (AWS). Automatic Train Protection (ATP) equipment had been switched off due to problems with the system and a lack of driver training in its operation. Teams of two drivers had been replaced by a single driver the previous year in an effort to cut costs. Great Western Trains were fined £1.5 million for violations of health and safety law.

Two years later in October 1999, near **Paddington** in London, 31 people were killed and 520 injured (Cullen 2001) when two passenger trains collided head-on. As in the Southall incident, the driver of one of the trains had run a signal. Once again, a number of contributing factors were identified. Railtrack had failed to convene a signal siting committee to review what was a known siting problem where the driver had passed the signal. Problems with driver training were also identified. Fitting of an ATP system had been rejected due to cost. Thames trains was ultimately fined £2 million, while Network Rail (the successor to Railtrack) received a fine of £4 million. The inquiry report explicitly pointed to a number of problems with the way privatisation had been carried out: Fragmentation created management problems; safety leadership had become inconsistent; performance targets had weakened the safety culture; franchises were too short with inadequate consideration of safety; too many contractors were insufficiently supervised by Railtrack. [32]

Fragmentation was at the heart of the fatal rail crash at Hatfield in the UK in 2000. Four people were killed and over 70 injured when a GNER train derailed outside of **Hatfield** station in Hertfordshire. [33] The derailment was caused by a fractured rail. The problem with the rail had been identified over a year earlier, but requests to address the problem from the regulator were passed between Railtrack and its contractors.[34] A replacement rail for the one which would eventually cause the derailment was delivered to the site in April 2000, but a time could not be agreed to schedule the maintenance. To avoid the high cost of re-scheduling trains during the summer period, the maintenance was finally scheduled for November 2000, one month too late.

Maintenance contractor Balfour Beatty was fined £7.5 million while Railtrack was fined £3.5 million. Charges of manslaughter brought against the companies and their executives were ultimately dropped. Nonetheless, the impact of this incident on Railtrack was decisive. Concerns over worn out rails meant that extensive rail replacement was carried out across the national network over the following year. This led to severe delays, huge losses and hefty fines. Railtrack's share value fell dramatically, on the basis that it was unprofitable if it is forced to be so safe; and all the companies involved denied responsibility.[35] Ultimately, this led to the dissolution of Railtrack. It was replaced by a state-owned, not-for-dividend company, Network Rail, in 2001.

Poor maintenance would be to blame for another deadly derailment in May 2002 at **Potter's Bar** just north of Greater London. Seven were killed and 76 injured when a West Anglia Great Northern train derailed as a result of points which had been poorly maintained due to inappropriate training for maintenance workers.[36] Private contractor Jarvis Rail ultimately accepted responsibility for the accident. Jarvis was fined £3 million, though it would take until 2011 for Network Rail to be fined £3 million. Once again, no individual or corporation was found criminally liable. However, the long-term impact of this and the preceding accidents on Network Rail culminated in a decision to take all maintenance work back in-house in 2003.

New Zealand

State-owned New Zealand Rail (NZR) was sold in 1993 to a consortium composed of a New Zealand merchant bank, a US railways operator, and an individual investor. [37] The company was renamed Tranz Rail Ltd. This marked the culmination of a decade-long process of increasing corporatisation and cost-cutting at the state rail company, with staffing levels slashed.

In the negotiations over the terms of privatisation, Tranz Rail managed to get its employees exempted from the national Health and Safety Act, and was left instead to devise and inspect its own safety systems. In the five years after privatisation, between 1995 and 2000, eleven Tranz Rail employees were killed. Armstrong (2013, 25–6) argues that several of these deaths were a direct result of staffing cutbacks and Tranz Rail's failure to comply with its own safety systems. The loss of life only ended with the successful call by the railworkers' union for an independent inquiry in 2000. After the inquiry, the number of derailments, injuries and deaths fell precipitously. In 2003 the exemption of rail employees from the Health and Safety Act was repealed.

Canada

In 1999, the Liberal government of Jean Chrétien deregulated rail transport by amending the *Railway Safety Act* to implement Safety Management Systems (SMS). This ended Transport Canada's role in the oversight of railroads, transferring responsibility to the individual companies to regulate themselves.[38]

A 2007 report by the Canadian Safety Council called for the reinstatement of government regulatory oversight, as the move to deregulation "remov[es] the federal government's ability to protect Canadians and their environment, and allow[s] the industry to hide critical safety information from the public." [39]
Concerns were expressed from a number of corners over both the design of rolling stock used to transport hazardous materials, and the rules governing the passage of trains carrying such freight through built-up areas. These fears would prove prescient.

In July 2013, a Montreal, Maine and Atlantic Railway (MMA) freight train carrying crude oil was parked overnight on a main line. An engine which was left running in order to maintain pressure in the air brakes failed, and hand brakes proved insufficient, allowing the train to run away unmanned. The runaway train derailed, setting off a fire and explosion that destroyed the town centre of Lac-Mégantic in the province of Quebec. The accident was the worst of its kind in Canadian history with 47 lives lost.

The investigation of the Transportation Safety Board (2014) revealed a host of failings including:

- An insufficient number of hand brakes had been set. Train owner MMA had not provided sufficient training for its staff on train securement;

- Safety systems were not in place to ensure braking in the event of engine failure. This reflected a company with a 'weak safety culture' and a safety management system that was not functioning effectively; and
- Inadequate safety oversight and discipline by the regulator Transport Canada had failed to correct similar problems that had been reported about MMA practices over a number of years.[40]

3.3 Water

UK - Disconnections by privatised water companies in the UK

Following privatisation of water in England and Wales in 1989, there was a sharp rise in the number of households disconnected from the water supply for falling behind on payments. In 1994, 18,636 households were disconnected by the privatised water companies. [41]

The companies were criticised for failing to exercise restraint or social responsibility over their disconnections policies, especially because cutting off water supplies endangers the health of the household and of the public. In 1992 there was a rise in the number of cases of dysentery reported, in all major conurbations in England (other than London). The water companies were further criticised for failing to notify cutoffs to the local authority, despite their statutory duty to do so and the attendant health risks of not reporting.[42] A court case was brought against the companies, supported by the medical and nursing professions, who argued that a clean water supply was essential for human life, hygiene and health:
"Both the NGOs concerned with child poverty and the medical profession opposed the disconnection of consumers who did not pay their bill, arguing that there was no reason why the companies should have access to a remedy for non-payment of debt that was not open to other creditors seeking to recover debts." [43]

When their powers to disconnect were curtailed, the companies started using 'pre-payment meters' for customers unable to pay their bills. These supplied water when charged with a card: otherwise the household would get no water. By 1996 over 16,000 had been installed, which led to "a startling increase in the number of hidden disconnections associated with these meters". A municipality successfully challenged the legality of these prepayment meters.[44] Finally, a new government passed a new Water Act in 1998, which made it illegal for water companies to disconnect customers' water supply, or to install pre-payment meters, or 'trickle valves'.

Brazil – disconnections and contaminated water

In Parana, Brazil, families were disconnected by Veolia's subsidiary, Sanepar, for failure to pay water bills. By November 2002, months after being disconnected, poor families in Maringá were reported as using rain water for cooking and drinking purposes. [45] In January 2003, consumers in Vila Democracia, in the metropolitan region of Paraná's capital city, Curitiba, were also using contaminated water because they could not afford to pay for the bills issued by Sanepar [46].

South Africa: deaths from cholera as a result of commercial charges for water

In August 2000, a cholera outbreak started outside Empangeni in Kwazulu-Natal, with later outbreaks elsewhere. By February 2002 the total death toll from cholera had risen to 260, the worst epidemic in the history of South Africa.[47] The development of the epidemic was linked by many, including South African Water and Forestry Minister Ronnie Kasrils, to the operation of government policies of full cost recovery for water. Kasrils said the health problems arose when the poor were excluded from water supplies because they could not afford full cost price of water. This policy was advocated by the World Bank, which argued that full cost recovery, without government subsidies, was necessary to attract private companies [48]

Gabon, water privatisation and typhoid

Gabon, a former French colony, sold 51 per cent of the state water and electricity company SEEG, to French multinational Veolia, in 1997, in a privatisation designed by the World Bank's private sector division, the International Finance Corporation (IFC). In December 2004, Gabon suffered its first ever outbreak of typhoid, with 50 cases in Oyem, a town of 35,000 people, following repeated breakdowns of the local water supply system. Julien Meye, a doctor at the endemic diseases service in Libreville, stated that the epidemic had broken out after several months of disruption to the supply of drinking water in Oyem. The people of Oyem complained of systematic water and electricity cuts in October 2004, and some of the villages in the surrounding area had not had water for several months. The deputy mayor, Emmanuel Obame Ondo, blamed the privatisation of water supply services for the breakdown in distribution, saying the country's water and electricity utility, SEEG, had failed to extend water pipes to newly built areas.[49]

3.4 Health

UK Hospital cleaning

Cleaning was one of the first services to be contracted out in the NHS in the 1980s. During the decade of the 1990s, there was an increased incidence of hospital acquired infections, such as meticillin-resistant *Staphylococcus aureus* (MRSA) and C *difficile*. These had an impact on the quality of patient care and the costs of treatment in the acute sector. An international study, published in 2002, established links between cleaning and hospital acquired infections. [50] In the last decade there has been an increased awareness among government auditors about the problems of improving cleaning practices in the NHS when specifications of cleaning contracts are difficult to change.

In a report by the Auditor General of Wales (2003), a link was made between contracting out of services and hospital infections. The findings of this study show how the contracting process needed more attention if standards of cleanliness were to improve. [51] Cleaning services were usually considered the responsibility of the cleaning staff and not that of staff, patients and visitors. The report found that cleaning

specifications had not kept up with changes in the hospital environment. The higher turnover of patients, new types of care and increased use of facilities all demand increased cleaning procedures. 25% of the 2,000 cleaning workers in Wales had only been in post for 6 months. Seven out of 17 acute hospitals in Wales had not re-written their cleaning contracts for 10 years, since the introduction of Compulsory Competitive Tendering. Three out of the four hospitals with an external contractor had kept the same contractor.

The failure to review cleaning specifications led to a failure to draw up a realistic cleaning budget. This affected the purchase of new cleaning equipment. Cleaning contracts often did not take into account the expansion of ward areas, which increase the volume of cleaning required. Increasingly, cleaning staff were involved in serving food and working as health care assistants, which limited the time available for cleaning. Staff absences and high staff turnover also contributed to difficulties in working to existing cleaning contract specifications.

Two case studies of hospital cleanliness in two acute hospitals in Scotland, which covered an in-house contractor and a Private Finance Initiative (PFI) (public-private partnership) contractor, found that in the case of the PFI hospital there was a "clear rift between the ICT members and the domestic team in the PFI case".[52] The infection control team in the PFI hospitals felt that the PFI contractor did not seek their advice or recognise their role. All domestic supervisors and nursing teams felt that working as a team was important but domestic staff had a different perception. In both cases, domestic staff felt that they were separated from the health care team. However, in the 'in-house' hospital, the infection control teams felt that the domestic team generally took advice from the infection control team and nurses in the in-house case. Meetings, in the form of in-house working groups and domestic services liaison groups, were an important way for the teams to share information. The situation in the PFI hospital was different. Domestic teams and clinical teams did not meet regularly. The PFI domestic manager reported that contact was made only when necessary.

In two reports in 2005 and 2007, Davies drew together research on hospital acquired infections with contracting out of services. [53] He argued that high quality cleaning has an important role to play in reducing hospital infections. The contracting process contributes to problems in drawing up contracts that are flexible enough to meet changed circumstances. External contractors are often unwilling to share poor financial and management information because it is considered commercially sensitive. This also results in problems of imposing sanctions. The separation of the cleaning team from other infection control teams in hospitals makes the process of improving cleanliness in a hospital more difficult and less coordinated. Cleaning is a labour intensive process so that any attempt to cut costs will be made at the expense of workers.

3.5 Serco

Table Deaths of workers and members of the public in contracts operated by Serco, 2006-2014

Country	Sector	Date		Sanctions and enquiries	Reports
UK	Road	2006	M5 motorway, Bristol. Maintenance worker killed by fall	£300,000 fine: "Serco did not plan, manage and monitor the work properly"	Companies fined £300,000 for worker's death on motorway
UK	Rail	2007	Docklands light railway, London. Passenger on line killed by train	£450,000 fine: "found guilty of breaching its heath and safety duties"	DLR operator fined £450,000 for failing to stop a train after a passenger fell onto the track
UK	Ferry	2011	Woolwich free ferry, London. Worker killed while mooring	"The unmooring operation was a routine task but it had not been captured by the company's safety management system"	Woolwich Ferry: Poor working practices blamed for teen's horrific death Critical report after ferry death
UK	Health care	2011	Cornwall: boy dies during 'after hours' medical services contract	"short of staff, provided inadequate training, left patients facing long waits and manipulated its results"	NHS watchdog severely reprimands Serco out of hours GP services in Cornwall
UK	Social care	2013	Woman dies after fall at care home.	Inquest, civil case (current 2014)	Jan 2014 Inquest likely after death of Ipswich woman following fall at Serco-run care home
UK	Detent-ion centres	2004 - 2014	7 Deaths of inmates in Colnbrook, Dungavel, Yarls Wood	e.g. Man transferred to hospital without medical notes	Serco on the stand: Death of a US tourist in UK immigration detention ; "we have frequently had to highlight the lack of clear and effective systems to ensure that the nature of an emergency is correctly communicated, and that healthcare and detention staff working in IRCs are sufficiently trained and equipped to deal with medical emergencies."
Aust-ralia	Detent-ion centres	2010	Three asylum seekers commit suicide in detention centre	Companies and state agency failed to care for the detainees; staff were "careless, ignorant or both", communications between agencies were "sadly lacking".	Detention centre staff condemned by coroner over deaths of Villawood detainees)

The table shows a series of deaths of workers and members of the public which have occurred in various sectors where the service operators have been criticised and/or fined by regulators, inquests, and official safety agencies, or have agreed to compensate families of the deceased, for failings in relation to the deaths. All the companies in the table are subsidiaries of Serco, a UK company which operates worldwide.

These deaths show the wide range of ways in which public safety can be affected by contractors' failings. There are some recurring themes in the inquests and official reports into these deaths.

Inadequate procedures

Serco was criticised for not planning and managing its motorway maintenance work properly; for not including the basic routine of unmooring a ferry in its safety management system; for not having an adequate procedure for stopping trains in an emergency; for not having systems to record falls by patients in care homes; and for lack of effective systems for communicating medical emergencies in detention centres. This failing applies across sectors, and over time, despite statements after each case that Serco would put in place procedures to ensure that such deaths would not happen again.

Lack of training

Serco was criticised for inadequate training of staff on its after-hours medical care contract; for inadequate training of its security and healthcare staff within detention centres; for failing to make its construction workers aware of risks. In addition to the deaths listed in the table above, Serco and other contractors have paid compensation in 14 cases where children in detention centres were forcibly restrained. [54]

Lack of communication and deliberate misrepresentation - between the private company and government agencies and other contractors

This was identified as a specific problem in relation to detention centre deaths in the UK and Australia, and the death of the passenger on the DLR, and the out-of-hours medical services contract, where Serco was criticised by the NAO for 'manipulating its results' by lying: "Serco staff fiddled the figures on an astonishing 252 occasions between January and June 2012."[55] Serco has also been fined for deliberately misrepresenting its performance on a contract for electronic tagging of prisoners. [56]

Lack of accountability

In the absence of direct public management, regulators and public agencies in all sectors had no control over or knowledge of Serco's operating performance until after the events.

All of these problems can be explained as systematic risks of outsourcing public service work in these areas. Contractors have a permanent incentive to reduce costs as a way of increasing profit margins, and cutting indirect overheads such as training and safety procedures are obvious candidates for such cost-cutting. They also have incentives to misrepresent their performance to avoid penalties or bad publicity.

These cases do not show that Serco is a-typically bad compared with other contractors. Culpable deaths have occurred under other contractors, for example, deaths of prisoners and detainees in contracts run by G4S. Rather, it illustrates the general risks of using contractors, because Serco operates across a far wider range of sectors and services than any other contractor. In addition to the services covered in the table – railways, ferries, security guards, roads maintenance, health care, social care, and prisons - it also has concessions and contracts to run airports, general administrative

tasks, laboratories, military data gathering, waste management, and other activities. Moreover, over95% of of Serco's business comes from public service contracts. It does almost nothing except public sector work, and so it is wholly dependent on government and local government policy decisions, which favour the use of privatisation and outsourcing. It does not bring expertise or finance from other operations supplying consumers and companies through normal markets. Its only expertise is in gaining and operating public service business.

4. Conclusion

The tragic sinking of the MV Sewol is another in a long list of preventable tragedies in maritime transport. This report has suggested that the role played by liberalisation in creating the conditions primed for such an accident to occur is not unique. Across a range of countries, the process of liberalisation has been deficient in its attention to the implications of the process for safety outcomes.

In the maritime transport sector, the deregulatory impact of the 'flagging out' of ownership has been critical. Competitive pressures lead ship owners to 'shop around' for a flag state which is most lenient in terms of its entry requirements, or which is willing to 'look the other way' when vessels do not meet those requirements. The same process repeats itself in the hiring of crew, and the selection of classification societies, inspectors and auditors. Those same economic pressures, where safety is not deeply embedded in corporate institutions and culture, incentivise reductions to investment, cuts in maintenance and training, and increased pressure on seafarers' working hours.

In the rail sector, privatisation has led to outsourcing, and the fragmentation of what was previously a unified body of knowledge of a complex network. Accountability may become diffused between regulator, private service provider and outsourced contractor. Once again, where new ownership lacks a corporate commitment to safety, a deregulatory shift to corporate responsibility for safety systems opens the way for the prioritisation of cost savings and the meeting of service requirements. The combination of these factors may lead to cutbacks in investment in new infrastructure, reductions in regular maintenance, and the employment of fewer railway workers toiling under intense pressure and lacking adequate training.

In the water sector, the effects of water privatisation in some countries have resulted in increased outbreaks of water borne diseases. Private companies have introduced policies of full-cost recovery for water services, which has increased the price of water. Increased prices lead to non-payment by low income households. Water companies have implemented disconnections if households fail to make payments for water services in a much more systematic way than government-run water services. This results in increased risks to health.

In the health care sector, the impact of the contracting out of cleaning services in the NHS results from the way in which the process of contracting out fragments cleaning activities from the rest of the hospital. When a service is contracted out, each activity,

which is included as part of the service, is itemised as a separate task. This works against the development of team work in the hospital. The move away from a holistic to a fragmented approach creates a lack of continuity between cleaners, clinical staff, managers, patients and visitors and there is no shared sense of responsibility for cleanliness across the hospital. The relationship between cleaning staff and clinical staff is crucial for maintaining high standards of cleanliness in a hospital.

This report provides some initial insight into the complex linkages between liberalisation and safety in the transport, water and health sectors. Further research is needed to extend the coverage and depth of that analysis.

In the maritime sector, with access to Lloyd's maritime data it might be possible to examine the relationship between deregulation and a number of variables such as casualties, changes in ship classification, and detentions related to safety deficiencies. Discussions at the national level with maritime workers' unions and maritime safety agencies could help to unpack the particular concerns about safety which have not been brought to light through accidents or casualties. Many gaps in our knowledge remain over the impact on safety of different models of financing, corporate governance and regulatory structure. Similarly, in the rail sector, further research is needed to synthesize lessons from national level examinations by regulators and trade unions of conditions before and after liberalisation. Preventing further tragedies like the sinking of the *MV Sewol* requires that transport workers' unions are ever-vigilant and are able to learn the lessons of the past.

Recommendations for Health and Safety Policy in Korea

- Lobby for the creation of a Corporate Manslaughter Bill – to make companies liable for the public safety of services provided
- Systems of public procurement to specific accountabilities and responsibilities for public safety
- Specifications, supported by law, of defined minimum staffing levels and continuous training on public transport and other public services
- Trade unions to monitor existing public safety arrangements in public services and identify deficiencies
- Trade unions to lobby for greater monitoring of quality of services and high standards of public safety
- Lobby for the setting up of a Korea Public Safety Agency and accompanying legislation to strengthen responsibilities and accountabilities for public safety at political, legal and social levels (workers/ services users)

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