

EXECUTIVE COUNCIL

CONFIDENTIAL

Title of Report: A Review of the Individual Transferable Quota System in the Falkland Islands

Paper No: 71/15

Date: 22nd April 2015

Report of: Senior Public Policy Advisor
Head of Policy

1.0 Purpose

- 1.1 To present findings of the Review of Individual Transferable Quota (ITQ) System in the Falkland Islands.

2.0 Recommendations

- 2.1 The following recommendations are based on the findings of the review. In each case a lead person has been identified to progress actions. Where appropriate these should be developed using a collaborative approach between FIG, FIFCA and the industry. Executive Council is recommended to agree the following actions:

- a) Develop and provide clarification of the definitions for the tests of effective control, active involvement and economic efficiency, as well as provide explanation of the consequences of non-compliance of the tests (FIG Fisheries; Policy Unit).
- b) Develop the economic efficiency test for fisheries other than Loligo (FIG Fisheries).
- c) Develop a feedback mechanism for the economic efficiency test that ensures commercial confidentiality, but provides feedback to ITQ holders on performance within the fishery (FIG Fisheries).
- d) Monitor profitability of the fisheries over the coming years. If finfish and Loligo continues to demonstrate poor profitability, consider options that could improve profitability (FIG Fisheries; FIFCA).
- e) Develop definitive rules and procedures regarding the trading of catch entitlement to increase transparency and avoid potential situations of long term (persistent) 'quota leasing' which is against the spirit of the ITQ system (FIG Fisheries).

- f) Review policy options and implications with regards to how ITQ rights should be allocated after the current tenure of ITQ expires. A firm decision is needed within the next five years. This must include consideration of whether rights be allocated for a fixed term or in perpetuity (FIG Fisheries; Policy Unit).
- g) At the time consideration is given to the next allocation of ITQ rights, the potential amalgamation of some finfish licence types to improve efficiency be revisited, along with aggregation limits for finfish (FIG; FIFCA).
- h) Develop proposals for tax incentives for ITQ holders in relation to research and development investments (FIG Fisheries; Policy Unit).
- i) Develop proposals to include fishing related capital investments in the emerging local investment strategy (FIG Treasury).
- j) Assess the level of appetite amongst industry for FIG to increase support and proactive promotion the Falkland Island fisheries internationally. A firm conclusion is needed as to whether this should remain an objective of the Economic Development Strategy (FIFCA).
- k) Hold a Presentation/Q&A session for interested parties in the fishing industry explaining aggregation limits and the technicalities around them (FIG Fisheries).
- l) Develop proposals for other fisheries to enter the ITQ system:
 - i) Revisit and progress work to date on proposals for Illex to enter the ITQ system (FIG Fisheries).
 - ii) Develop proposals for a Grenadier fishery taking into account the potential effects on the Toothfish fishery (FIG Fisheries).

3.0 Additional Budgetary Implications

3.1 None.

4.0 Background

- 4.1 A review of Licensing Policy and Fisheries Management was undertaken in 2002/03 which resulted in the introduction of a system of transferable property rights within the Falkland Islands fishing industry (known as the Individual Transferable Quota (ITQ) system). The Fisheries (Conservation and Management) Ordinance 2005 enacted the legislation with the Loligo and Toothfish fisheries entering the ITQ system during 2006, with other finfish fisheries entering the ITQ system in 2008. The Illex fishery did not enter the ITQ system.
- 4.2 The ITQ system replaced a previous system which involved a competitive bidding process for licenses issued on a basis of one to five years.

- 4.3 The need for reform was driven by a number of limitations in the previous licensing policy. The 2002/03 review determined that without change:
- In the short term, Falkland Island fishing companies would find it difficult to generate the cash flows and capital required to maintain a viable presence in Falkland Island Fisheries;
 - In the medium term, the Falkland Islands economy would remain incapable of capturing a significant share of the total turnover of fisheries, which at the time was estimated to be worth approximately £200 million per year;
 - Government revenues from fishing would decline in real terms as revenue from licenses remained static or declined which in the absence of other sources of revenue might threaten delivery of key Government services (such as health and education for example).
- 4.4 The length of ITQ was set at 25 years. Towards the end of 2013 and again in early 2014, Executive Council set out instruction for the ITQ system to be reviewed. The terms of reference to the review (Appendix 1 of attached report) were set out in Executive Council paper 59/14 with a purpose of assessing the ITQ system to date in terms of whether it was achieving the intended objectives.
- 4.5 The attached report details the full findings of the review.

5.0 Key Findings

- 5.1 The ITQ system has delivered tangible benefits to the Falkland Islands and to the companies involved in fisheries that are unlikely to have materialised without it. ITQ has given security to companies, enabled them to plan and develop the business, and take a longer-term view, though the evidence of the extent to which ITQ is achieving all of its intended effects is mixed. This is not surprising given that ITQ is less than 10 years into operation – some impacts will only be observable in the longer term.
- 5.2 ITQ has provided an opportunity for Falkland Islanders to be at the forefront of the industry by virtue of ownership of long-term fishing rights. There is strong evidence of ‘active involvement’ of local fishing companies in the management and operation of Falklands fishing activities – meaning that Falkland Islanders are materially participating in management decisions – and not simply ratifying decisions made by a partner. This ‘active involvement’ is apparent across the industry. However evidence of ‘effective control’ is more mixed, specifically in the case of joint venture arrangements.
- 5.3 There is a perception amongst most ITQ holders that economic and financial performance of the sector has been enhanced by the introduction of ITQ. However, there is no clear trend in the data to be able to state the case either way. ITQ holders have increased security of access to the fisheries which has enabled them to plan longer term and have some flexibility in the way they structure their activities.

- 5.4 Removing the annual bidding process for licences has enabled companies to focus on growing their business making them more competitive. ITQ holders have capitalised on this to varying degrees.
- 5.5 Toothfish, Loligo and finfish have varying levels of profitability. Based on data provided by ITQ holders, Toothfish gross margins have steadily increased to a good level. Loligo gross margins have decreased in recent years and in 2013 was below zero. Finfish consistently has lowest profitability and in 2013 was below zero. The finfish fisheries are much more marginal than the Loligo and Toothfish fisheries.
- 5.6 There has been limited diversification into value added activities such as processing and marketing. Where it has occurred, investment has been made in both the Falkland Islands and overseas. Investment into other fishing related assets has been minimal due to logistics, distance to market, lack of infrastructure and, according to some fishing companies, a lack of confidence in FIG political decision making. ITQ has enabled some companies to diversify into other fishing and non-fishing related activities. In some cases ITQ has not necessarily been the reason development has occurred, but has most definitely been a catalyst to increased activity as they have certainty of access to the fishing resource which enables them to focus on developing other parts of the business rather than the uncertainty of the previous annual licence application process.
- 5.7 This limited diversification means that the Falkland Islands Government remains heavily reliant on fishing licence/quota access revenues - the lack of diversification means that revenues from a broader range of seafood and related economic activity have not materialised to the extent anticipated during the initial period of ITQ.
- 5.8 There has been limited investment by ITQ holders in research and development to date, though there are some examples of scientific research being funded and some collaboration between ITQ holders, FIG and research institutions through the funding of scientific research posts.
- 5.9 There has been increased cooperation and collaboration between industry members as competition for licences has been removed.
- 5.10 ITQ holders reported an increase in environmental stewardship as they all have a stake in the fishery, although the Falkland Islands was already starting from a high base. It has been a process of evolution rather than revolution and the system means that if there is a future benefit from conservation action now, ITQ holders are not foregoing something now that a competitor might reap the benefit from in the future which was the risk under the previous short term licencing system.
- 5.11 Most ITQ holders felt the ITQ system was meeting their expectations in relation to financial performance, although most expected more trading of ITQ holdings. The flexibility in the ITQ system in terms of trading fishing days is

beneficial to companies, although further work is required around rules, procedures and monitoring of trading to aid transparency.

- 5.12 Opportunities for new entrants to the sector have been limited as trading has not occurred to a great extent or at the level expected by some in the industry. That said some 'new blood' is beginning to enter the industry as some ITQ holders had thought about and were implementing succession planning. There were examples where family members had taken over the running of the business, and where others were involved in the business with a view to 'learning the ropes'. At this stage, there is no strong rationale for Government intervention to reduce barriers to entry – though this could be reviewed at a future date when there may be more evidence of trading (or lack of trading) in ITQ.
- 5.13 Access to finance locally was perceived as a problem for ITQ or other fishing related investments, but finance is generally available through other means such as joint venture arrangements or overseas financial institutions. Nonetheless, there is merit in fishing related investments being included in the emerging FIG Local Investment Policy as a means to further encourage development (and perhaps make investments more affordable for fishing companies whilst still generating FIG a return on investment).
- 5.14 ITQ holders recognised the need for some form of 'test' or criteria to ensure companies were in control of their rights, involved in fishing, and that they were doing so in an efficient and effective way. Greater clarification and explanation of the tests of 'effective control', 'active involvement' and 'economic efficiency' are required together with the consequences and enforcement action that will be taken where there is non-compliance. More feedback on efficiency compared to other companies within a fishery would help companies in understanding their performance in relation to other ITQ holders.
- 5.15 The ITQ system has brought about some efficiencies, for example, there are some examples of vessel sharing arrangements between ITQ holders.
- 5.16 A number of ITQ holders have raised concerns that the remaining tenure of the ITQ (of around 16 years) is insufficient to enable them to make long-term investment decisions or to make a return on investment (and this was seen as a barrier inherent with the design of ITQ). Whilst a remaining tenure of 15 years may pose some issues for long-term investments (i.e. where the life of the investment is intended to be longer than that period), the limited investments observed to date by some (but not all) companies suggest there are other factors at work and focus should not solely rest on the remaining tenure of ITQ.
- 5.17 A decision will be required on the issue of extension of ITQ tenure within the next 5 years. In doing so consideration will need to be given to whether rights will be extended for another fixed period or offered in perpetuity.

5.18 Overall, there are some positive findings in terms of the impact of ITQ to date, though some areas of concern remain and some immediate actions that could be taken to address specific points of detail (see recommendations). Any more fundamental changes to the ITQ system would be premature at this stage as its introduction remains relatively recent and the longer-term impacts have yet to have sufficient time to fully materialise. Some companies interviewed agreed that it was still ‘early days’ in terms of the ITQ system, and believed that more development, growth and expansion would come in the future. Some indicated that they were building reserves to enable future expansion and development – though this claim is somewhat at odds with concerns that the tenure of ITQ is already running down to an extent that is discouraging further investment. Any consideration of extension to ITQ rights should come with real commitments to future investment in the industry to the benefit of the Falkland Islands (and not just to the company involved).

5.19 The attached report details the full findings of the review.

6.0 Financial Implications

6.1 There are no financial implications as a result of this paper.

6.2 There may be financial implications arising from some recommendations but these will not be immediate and as yet are unquantifiable. Whether or not there will be financial implications depends on the outcome of the work produced as a result of the recommendations of this paper and these would be submitted back to ExCo at the appropriate time for consideration.

7.0 Legal Implications

7.1 There are no immediate legal implications as a result of this paper. However, the Attorney General advises that some of the proposals made in the paper present a number of possible legal issues which need to be examined in detail at the time work is undertaken to develop the actions proposed by the recommendations.

7.2 Should recommendation f. be approved, at the time policy options are developed, Honourable members will wish to be satisfied that proposals comply with the 2008 Constitution. It is likely that Amendment will be required to the Fisheries (Conservation and Management) Ordinance 2005.

7.3 The demands of this work upon the Government Legal Service may be significant but should be manageable, with perhaps a small amount of outsourced support drawn from existing budgets.

8.0 Human Resources Implications

8.1 There are no specific human resource implications. Actions arising as a result of this review will be undertaken using existing resources and time will need to be dedicated by officers in the departments named.

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A Review of the Individual Transferable Quota System in the Falkland Islands

**Policy Unit
Falkland Islands Government**

March 2015

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Acknowledgement

The Policy Unit would like to thank ITQ holders and their companies for their time in taking part in the interviews, supplying the data requested and providing honest feedback.

Abbreviations

ExCo Executive Council

FIFCA Falkland Island Fishing Companies Association

FIG Falkland Islands Government

FIPASS Floating Interim Port and Storage System

GDP Gross Domestic Product

ITQ Individual Transferable Quota

MSC Marine Stewardship Council

1 Background

- 1.1 A review of Licensing Policy and Fisheries Management was undertaken in 2002/03 which resulted in the introduction of a system of transferable property rights within the Falkland Islands fishing industry (known as the Individual Transferable Quota (ITQ) system). The Fisheries (Conservation and Management) Ordinance 2005 enacted the legislation with the Loligo and Toothfish fisheries entering the ITQ system during 2006, with other finfish fisheries entering the ITQ system in 2008. The Illex fishery did not enter the ITQ system.
- 1.2 The ITQ system replaced a previous system which involved a competitive bidding process for licenses issued on a basis of one to five years.
- 1.3 The need for reform was driven by a number of limitations in the previous licensing policy. The 2002/03 review determined that without change:
 - In the short term, Falkland Island fishing companies would find it difficult to generate the cash flows and capital required to maintain a viable presence in Falkland Island Fisheries;
 - In the medium term, the Falkland Islands economy would remain incapable of capturing a significant share of the total turnover of fisheries, which at the time was estimated to be worth approximately £200 million per year;
 - Government revenues from fishing would decline in real terms as revenue from licenses remained static or declined which in the absence of other sources of revenue might threaten delivery of key Government services (such as health and education for example).
- 1.4 The length of ITQ was set at 25 years. Towards the end of 2013 and again in early 2014, Executive Council set out instruction for the ITQ system to be reviewed. The terms of reference to the review (Appendix 1) were set out in Executive Council paper 59/14 with a purpose of assessing the ITQ system to date in terms of whether it was achieving the intended objectives.

2 Objectives of the ITQ System

- 2.1 Based on research from a number of rights-based management systems in operation elsewhere in the world, there were a number of anticipated benefits in moving to an ITQ system in the Falkland Islands, including:
 - Economic performance of the sector would be enhanced as fishing companies have security of access to the resource and flexibility in the way they decide to structure activities to take advantage of business opportunities.
 - Diversification would occur into value-added activities such as processing and marketing as companies could invest in assets other than vessels.
 - Seafood companies would invest more in research and development because long-term rights meant they would benefit from investments that had longer pay-off periods.
 - There would be increased co-operation between industry members on research and development, enforcement and environmental issues as companies no longer had to compete with each other for licences.
 - International competitiveness would increase as poorly performing companies would sell rights to well performing companies.

- Profitability of the sector would increase which would increase revenue to Government through tax.
 - Environmental stewardship would increase because fishing companies would hold valuable long-term rights to a proportional share of a fishery.
- 2.2 This review sought to assess the extent to which these anticipated benefits have been realised, as well as evaluate whether ITQ has:
- Continued to contribute to Falkland Island economic growth and private sector development.
 - Led to increased opportunities in the sector for new entrants and existing ITQ holders, as well as opportunities for existing ITQ holders in other sectors.
 - Encouraged investment by companies into fishing related business, including vessels.
 - Raised any funding issues in relation to the ITQ system, including how ITQ are purchased or transferred and the source of funding for transactions.
 - Identified any potential barriers to greater sector performance inherent in the design of the current ITQ system and potential barriers to entry or exit of the sector.
- 2.3 To protect the interests of the Falkland Islands and ensure that fishing rights are being used in the way intended, the Fisheries (Conservation and Management) Ordinance 2005 requires that companies holding ITQ rights satisfy three ‘tests’:
- The company will be in ‘*effective control*’ of how its ITQ rights are used.
 - The company will be ‘*actively involved*’ in one or more of taking, processing or selling fish commensurate with the level of its business activity.
 - The company’s income and economic returns from taking, processing and sale of fish represents a sufficient return on the value of the rights held and does not over a reasonable period, represent a significantly lower rate of return than that received by holders of similar rights, known as the ‘*economic efficiency*’ test.
- 2.4 The review explored companies understanding of these tests, together with views on the effectiveness and appropriateness of them and how they felt their company satisfied the tests.
- 2.5 Other areas covered by the review included whether the ITQ system was meeting expectations of the fishing industry, if and how ITQ could be applied to other Falkland fisheries, and the role of Government. Although not directly part of the terms of reference of the review, other related topics were frequently mentioned and so reference is made to those in this report including for example, the role of FIPASS and infrastructure, fisheries patrol and licence/quota access fees.
- 2.6 This is the first attempt to evaluate the impact of the move to the ITQ system for the Falkland Islands fishery since its implementation in 2006 (and 2008). In the sense of fundamentally altering the system of allocating rights, ITQ is still relatively new and it should not be expected that all the anticipated benefits will have fully materialised in this short time period. However, this report does attempt to evaluate the extent to which benefits are beginning to be realised.

3 Process

- 3.1 Demand for a review of the ITQ system stems back to April 2011 when Executive Council agreed proposals for the application of the economic efficiency test to the Loligo fishery. This Executive Council paper (85/11) also considered the need for a wider review of fisheries policy and how ITQ was progressing which was agreed by Executive Council.
- 3.2 In December 2013 during consideration of paper 242/13 (Fishing Access Fees), Executive Council instructed a review of ITQ be undertaken. In February 2014 the Fisheries Committee considered draft terms of reference for the review, followed by a meeting between representatives of the Policy Unit, Natural Resources and FIFCA to discuss and finalise the terms of reference.
- 3.3 The terms of reference (Appendix 1) were presented to, and agreed by Executive Council in March 2014 (paper 59/14).
- 3.4 During June and July 2014 ITQ holders were asked to complete a financial and economic pro forma providing a series of data for analysis by the Policy Unit Economist.
- 3.5 Between July and November 2014, face to face interviews were conducted by the Senior Public Policy Advisor from the Policy Unit with the 14 ITQ holders. Interviews typically lasted between 90 minutes and three hours depending on the setup, organisation and operations of the company. The fieldwork phase took longer than anticipated due to spanning the holiday season, business commitments and resource issues.

4 Key findings

- 4.1 The ITQ system has delivered tangible benefits to the Falkland Islands and to the companies involved in fisheries that are unlikely to have materialised without it. ITQ has given security to companies, enabled them to plan and develop the business, and take a longer-term view, though the evidence of the extent to which ITQ is achieving all of its intended effects is mixed. This is not surprising given that ITQ is less than 10 years into operation – some impacts will only be observable in the longer term.
- 4.2 Assessing the overall impact of ITQ is not straightforward due to the variety of different company structures and different approaches used in the exploitation of the ITQ. This combined with varying market conditions for different species of fish and different levels of ITQ holdings mean that there is no simple answer – the effects vary by company, by type of catch and by level of ITQ holding. This report has sought to capture these effects and highlight areas of success and some areas of underperformance in terms of the effectiveness of the ITQ system in delivering the outcomes it was intended to achieve.
- 4.3 Measured by GDP, fishing is the most important industry in the Falkland Islands. In 2012 it contributed 34 per cent to GDP¹. On the other hand it does not contribute so much to employment onshore. Almost all of the crews working on the fishing vessels

¹ Falkland Islands National Accounts

come from other countries and in 2012 only 58 Falkland Islands residents considered Fishing as their primary employment². The Falkland Islands fishing fleet is mostly owned by joint ventures between Falkland Island companies and foreign owners. Completely foreign owned vessels, particularly jiggers which are in the fishery outside the ITQ system, also operate in Falkland Islands waters. Therefore, a considerable share of the benefits of fishing goes to players outside the Islands. Nevertheless, the Islands benefit from fishing in many ways. Fishing licence/quota access fees are typically the biggest single source of government revenues (apart from non-regular corporate tax revenues relating to hydrocarbons farm-in deals). Fishing licences have generated between £10 and £30 million per annum since first charged in 1987³. Fishing companies are also considerable contributors to corporate tax revenues, about £1-4 million per year⁴ which typically means 30-45 per cent of total corporate tax collected. On top of these there are indirect benefits to the onshore economy through the goods and services fishing fleets acquire locally such as, for example, flights and accommodation for crew, engineering and financial services etc.

- 4.4 ITQ has provided an opportunity for Falkland Islanders to be at the forefront of the industry by virtue of ownership of long-term fishing rights. There is strong evidence of 'active involvement' of local fishing companies in the management and operation of Falklands fishing activities – meaning that Falkland Islanders are materially participating in management decisions – and not simply ratifying decisions made by a partner. This 'active involvement' is apparent across the industry. However evidence of 'effective control' is more mixed, specifically in the case of joint venture arrangements.
- 4.5 There is a perception amongst most ITQ holders that economic and financial performance of the sector has been enhanced by the introduction of ITQ. However, there is no clear trend in the data to be able to state the case either way. ITQ holders have increased security of access to the fisheries which has enabled them to plan longer term and have some flexibility in the way they structure their activities.
- 4.6 Key factors affecting international competitiveness of the industry are the price of fish, fuel prices, volume and volatility of catch, profitability and outside political interferences - most outside the control of the ITQ holder. However, removing the annual bidding process for licences has enabled companies to focus on growing their business making them more competitive. ITQ holders have capitalised on this to varying degrees.
- 4.7 Toothfish, Loligo and finfish have varying levels of profitability. Based on data provided by ITQ holders, Toothfish gross margins have steadily increased to a good level (REDACTED). Loligo gross margins have decreased in recent years and in 2013 was below zero. Finfish consistently has lowest profitability and in 2013 was below zero.
- 4.8 The finfish fisheries are much more marginal than the Loligo and Toothfish fisheries. Although quota access fees have remained static, overall the cost of sales per tonne of catch has increased. This is particularly an issue for those operating only in the

² Census 2012

³ FIG Statistics Yearbook 2014

⁴ Tax Data

finfish fisheries which has the lowest profitability but greatest increase in cost of sales per tonne in relative terms over the last 10 years.

- 4.9 There has been limited diversification into value added activities such as processing and marketing. Where it has occurred, investment has been made in both the Falkland Islands and overseas. Investment into other fishing related assets has been minimal due to logistics, distance to market, lack of infrastructure and, according to some fishing companies, a lack of confidence in FIG political decision making. ITQ has enabled some companies to diversify into other fishing and non-fishing related activities. In some cases ITQ has not necessarily been *the* reason development has occurred, but has most definitely been a catalyst to increased activity as they have certainty of access to the fishing resource which enables them to focus on developing other parts of the business rather than the uncertainty of the previous annual licence application process.
- 4.10 This limited diversification means that the Falkland Islands Government remains heavily reliant on fishing licence/quota access revenues - the lack of diversification means that revenues from a broader range of seafood and related economic activity have not materialised to the extent anticipated during the initial period of ITQ i.e. there is no evidence to date that ITQ has significantly reduced the Government's fiscal risk associated with reliance on revenue from licence/quota access fees at this stage.
- 4.11 There has been limited investment by ITQ holders in research and development to date, though there are some examples of scientific research being funded and some collaboration between ITQ holders, FIG and research institutions through the funding of scientific research posts. Some fishing companies claim that they are building reserves to be used for research and development at an appropriate time.
- 4.12 There has been increased cooperation and collaboration between industry members as competition for licences has been removed, however, there appears to be some suspicion and scepticism over operations of other companies amongst those operating in different fisheries, particularly where companies operate exclusively in one fishery. The Fisheries (Conservation and Management) Ordinance 2005 provided a mandate for the establishment of the Falkland Islands Fishing Companies Association (FIFCA) and it is a valued organisation for members in terms of representing industry to Government. It is a beneficial source of advice for FIG and is seen as a broadly representative organisation that offers value to FIG in enhancing its engagement and interaction with the industry.
- 4.13 ITQ holders reported an increase in environmental stewardship as they all have a stake in the fishery, although the Falkland Islands was already starting from a high base. It has been a process of evolution rather than revolution and the system means that if there is a future benefit from conservation action now, ITQ holders are not foregoing something now that a competitor might reap the benefit from in the future which was the risk under the previous short term licencing system.
- 4.14 Most ITQ holders felt the ITQ system was meeting their expectations in relation to financial performance, although most expected more trading of ITQ holdings. The flexibility in the ITQ system in terms of trading fishing days is beneficial to companies, however some additional measures are needed to monitor such trading and to prevent persistent trading of days where this is simply being used to generate

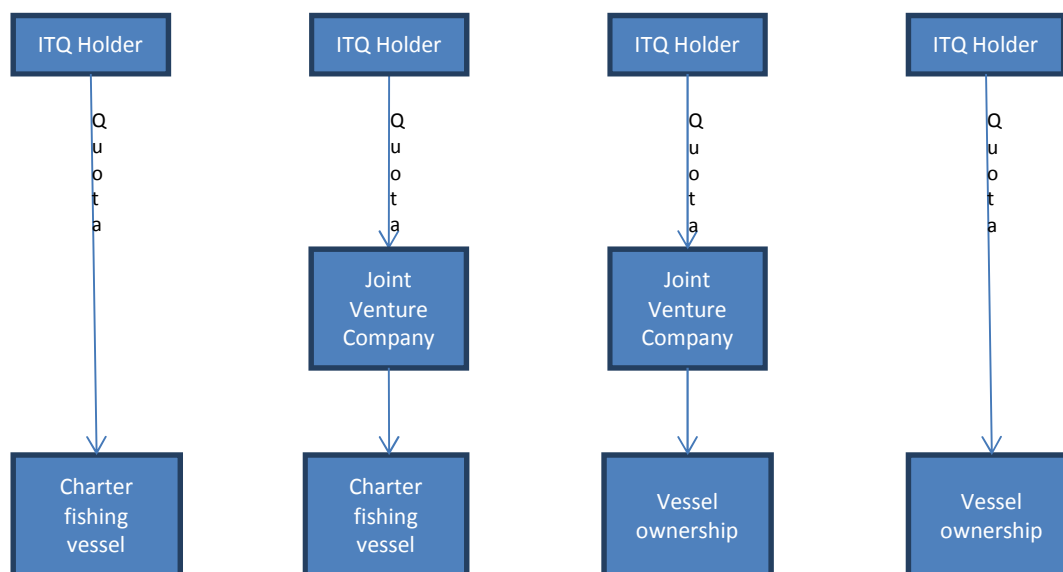
revenue from the ITQ holding (as that is inconsistent with the principle of economic efficiency). Currently all trades of catch entitlement are registered and recorded and trading has been modest to date. Some trading should be allowable, but it should be the exception rather than the rule to avoid 'quota leasing' that merely benefits the owner of the ITQ with minimal effort required.

- 4.15 Opportunities for new entrants to the sector have been limited as trading has not occurred to any great extent or at the level expected by some in the industry, and the barriers to entry to the industry are high. Any new entrant must finance the cost of the ITQ itself, as well as the purchase or lease of a vessel or enter into charter arrangements and purchase the fishing licence (although depending on the arrangements, once ITQ secured these things may follow as a matter of course). There may also be additional barriers if the new entrant does not have access to marketing and distribution channels or the necessary skills and resources to identify a partner to provide these. Entrants may also be discouraged given the uncertainties associated with regulation that affects potential future revenue streams i.e. ITQ provides an opportunity for revenue flow from a fishery, however as the quota is a percentage of a set total allowable catch the quantity landed year on year will vary, creating uncertainty over future profit levels. That said some 'new blood' is beginning to enter the industry as some ITQ holders had thought about and were implementing succession planning. There were examples where family members had taken over the running of the business, and where others were involved in the business with a view to 'learning the ropes'. At this stage, there is no strong rationale for Government intervention to reduce barriers to entry – though this could be reviewed at a future date when there may be more evidence of trading (or lack of trading) in ITQ.
- 4.16 Access to finance locally was perceived as a problem for ITQ or other fishing related investments, but finance is generally available through other means such as joint venture arrangements or overseas financial institutions. Nonetheless, there is merit in fishing related investments being included in the emerging FIG Local Investment Policy as a means to further encourage development (and perhaps make investments more affordable for fishing companies whilst still generating FIG a return on investment). Given the challenges within the sector it is not advisable to seek to restrict potential sources of finance at this time as this may merely stifle further development and investment. Nonetheless additional safeguards may be necessary to retain effective control in circumstances where finance is secured from an overseas joint venture partner.
- 4.17 ITQ holders recognised the need for some form of 'test' or criteria to ensure companies were in control of their rights, involved in fishing, and that they were doing so in an efficient and effective way. Greater clarification and explanation of the tests of 'effective control', 'active involvement' and 'economic efficiency' are required together with the consequences and enforcement action that will be taken where there is non-compliance. More feedback on efficiency compared to other companies within a fishery would help companies in understanding their performance in relation to other ITQ holders.
- 4.18 The ITQ system has brought about some efficiencies, for example, there are some examples of vessel sharing arrangements between ITQ holders.

- 4.19 A number of ITQ holders have raised concerns that the remaining tenure of the ITQ (of around 16 years) is insufficient to enable them to make long-term investment decisions or to make a return on investment (and this was seen as a barrier inherent with the design of ITQ). Whilst a remaining tenure of 15 years may pose some issues for long-term investments (i.e. where the life of the investment is intended to be longer than that period), the limited investments observed to date by some (but not all) companies suggest there are other factors at work and focus should not solely rest on the remaining tenure of ITQ. The argument does hold some merit in relation to research and development investments which are typically longer term in nature, however given the small amounts of research and development investments during the first 10 years, this argument does not appear to be backed up by the evidence. Rather than a true barrier to development this seems to be a preference in the Islands (for example, see the similar arguments put forward in relation to land ownership tenure in the Islands – with 99 year land leases also being cited insufficient to leverage and secure investment – there is no evidence to support this yet it is clearly a *preference* to hold property rights in perpetuity).
- 4.20 A decision will be required on the issue of extension of ITQ tenure within the next 5 years. In doing so consideration will need to be given to whether rights will be extended for another fixed period or offered in perpetuity (and if so, are the rights to exploit the resources to be allocated free as per the current arrangement, or at a cost given the inherent value that they hold?).
- 4.21 Overall, there are some positive findings in terms of the impact of ITQ to date, though some areas of concern remain and some immediate actions that could be taken to address specific points of detail (see recommendations). Any more fundamental changes to the ITQ system would be premature at this stage as its introduction remains relatively recent and the longer-term impacts have yet to have sufficient time to fully materialise. Some companies interviewed agreed that it was still ‘early days’ in terms of the ITQ system, and believed that more development, growth and expansion would come in the future. Some indicated that they were building reserves to enable future expansion and development – though this claim is somewhat at odds with concerns that the tenure of ITQ is already running down to an extent that is discouraging further investment. Any consideration of extension to ITQ rights should come with real commitments to future investment in the industry to the benefit of the Falkland Islands (and not just to the company involved).

5 How ITQ holders fish their quota

- 5.1 At the time of fieldwork there were 14 ITQ holders (now 13) operating in Falkland waters and they use a range of models to fish their quota. Many ITQ holders felt it was appropriate to have this level of diversity as one approach does not necessarily make it good or the most efficient means for a particular fishery. Diversity in this case is both better for the companies involved, as well as the industry as a whole. ITQ holders have the flexibility to use an approach more efficient and economically beneficial for their company, a significant improvement on the licencing system under the previous fishing policy which often forced companies down a particular route that did not always make commercial sense for the company.
- 5.2 The four basic approaches to fishing the quota are illustrated below:



- 5.3 The approach used by ITQ holders to fish their quota ranges from no joint ventures and chartering a vessel, through to arrangements with joint venture partners and chartering a vessel, owning vessels with a joint venture partner, through to no joint ventures and full vessel ownership. Some ITQ holders use a mixture of these approaches.

6 The tests of ‘Effective Control’, ‘Active Involvement’ and ‘Economic Efficiency’

- 6.1 To protect the interests of the Falkland Islands and ensure that fishing rights are being used in the way intended, the Fisheries (Conservation and Management) Ordinance 2005 requires that companies holding ITQ rights satisfy three ‘tests’:
- The company will be in ‘*effective control*’ of how its ITQ rights are used.
 - The company will be ‘*actively involved*’ in one or more of taking, processing or selling fish commensurate with the level of its business activity.
 - The company’s income and economic returns from taking, processing and sale of fish represents a sufficient return on the value of the rights held and does not over a reasonable period, represent a significantly lower rate of return than that received by holders of similar rights, known as the ‘*economic efficiency*’ test.
- 6.2 Most ITQ holders recognised the need for some form of ‘test’ or criteria to be measured against to ensure that companies owning ITQ were using it proactively in a way that was in the best interests for the Falkland Islands, the fisheries, and protection of the natural resource. There is a need for companies to be able to demonstrate that they are in control of their rights, can demonstrate they are actively involved in fishing and not merely acting as a ‘front’ for a foreign partner, a view shared by the industry. One ITQ holder suggested it was in the companies’ interests to have the tests in order for them to be able to demonstrate they are proactively fishing their quota in an efficient way, not falling behind others which would potentially put them in a strong position for whatever came after 2031.

- 6.3 The three tests were meaningful and potentially achievable, with companies not being forced down routes that were not necessarily in the best interests of their business as was the case under the previous fishing policy. ITQ holders believed they understood the meanings of the tests, but many expressed that while they were mentioned in the Ordinance, work is needed to improve the definition and detail so companies had a greater understanding and know exactly what was required. Many felt they were doing what was required, but feedback, greater detail and better definition would clarify the requirement. Understandably ITQ holders were cautious that clarification of definition did not mean an opportunity to change the tests to make them more onerous and time consuming, distracting them from developing and growing their company. A balance is therefore needed to ensure the current tests are better defined without fundamentally changing the meaning or requirement on companies.
- 6.4 In applying the tests, ITQ holders expressed a need for FIG to take a flexible approach given the different arrangements and approaches taken by different companies. The test of economic efficiency could be comparable within fisheries, but a blanket tightly prescribed approach to active involvement may be difficult. ITQ holders know they are required to be in effective control and actively involved and each have interpreted this and applied it to their own situation and demonstrated how they felt they achieved this. ITQ holders were able to give examples of how (in the case of joint venture arrangements for example) they had been able to negotiate favourable terms and exercise greater influence and control (compared to the old system) over the decisions and actions of joint venture partners.
- 6.5 ITQ holders were not clear on what would happen if found to be non-compliant with the tests or what form enforcement would take (or even if it would take place). However, most felt some remedial action should be taken by FIG if a company was found to be not in control, involved or poorly operating their ITQ. Before this could happen, clarification is required not only on the detail of the tests so companies know exactly what they need to do to demonstrate compliance, but also detail around the consequences of non-compliance to aid transparency of the process. Government should be actively monitoring the tests not only to ensure companies were performing as well as they could be, but also to avoid the system becoming void if the tests have no meaning.

7 Effective Control

- 7.1 Effective control requires greater clarification, though it was deliberately not defined in any quantitative terms at the outset of the ITQ policy. In essence it is a qualitative decision which the Director of Natural Resources is empowered to make based on the available evidence. A company will normally be deemed to be under the effective control of another if the former:
- Is accustomed to following the instructions of the latter
 - Is accustomed to acting in a manner consistent with advancing the interests of the latter (though nowhere has it been determined how to distinguish such interests from those of the local joint venture partner).
- 7.2 The Director of Natural Resources' view of effective control of how ITQ rights are used is as a high level test. To be in control, ITQ holders should have the right to sell their

ITQ holdings tomorrow if they wish (which would of course mean discharging any outstanding financial obligations which may take a period of time) but in essence there should be nothing preventing the decision.

- 7.3 Effective control appeared to have different interpretations amongst those in the industry. For some, in its basic sense they felt able to demonstrate that by having no reliance on joint venture arrangements either because they chartered a vessel to fish their quota, or owned a vessel to fish their quota, then they had total control over their ITQ with no external influences. This was similar where joint venture arrangements existed and the ITQ holder had a majority share in the joint venture arrangements which legally gave them the majority vote, and is consistent with the definition adopted.
- 7.4 Some companies questioned the ability of an ITQ holder to be in effective control of their quota where they were in a joint venture arrangement without a majority share. However, ITQ holders in these circumstances were able to provide examples of how owning the fishing rights gave them a stronger position than the percentage owned in the joint venture would suggest – however this in itself indicates influence rather than control (see separate discussion below on active involvement). Although sometimes challenging at the immediate outset of the introduction of the ITQ system, ITQ holders now feel they have greater ‘power’ and leverage in terms of negotiation and influence over decisions – but this does not always necessarily amount to control. One ITQ holder gave the example that they had been able to negotiate with their joint venture partners payment of a fee to fish one of the fisheries not in ITQ, with profit from fishing that fishery being fed back into the joint venture company with a view to it being invested to help the company develop when the time was right. The ITQ holder felt it was likely they would not have been able to do this without the security of ITQ.
- 7.5 Where previously ITQ has been purchased with foreign fishing company finance (where some may suggest undue influence), the Director of Natural Resources has required there to be a clause in agreements indicating that the local ITQ holder can sell at anytime. ITQ holders in joint venture arrangements are required to protect their position on ITQ rights and the Director of Natural Resources has the ability to stipulate agreements be changed where they fall foul of the ordinance on that point (and this has been invoked previously). However, it could be argued that this clause alone is not enough to demonstrate effective control, and in the absence of a clear definition for the test with transparent rules and procedure for testing, the assessment should not ultimately be the responsibility of one person.
- 7.6 In some, but not all cases, joint venture arrangements were in place for a period of time with a set review date and it had been written into some agreements that in certain circumstances, the ITQ holder could break the agreement ahead of time and seek alternative arrangements. Others were able to seek alternative arrangements for their quota with little notice, although most were of the opinion that unless there was a serious breakdown in relationships, or there was some extraordinary event, they did not need to change arrangements and potentially lose experienced partners or captains who know the Falkland Islands waters. Examples were given including, for example, an ITQ holder had been able to leverage a reduction in the fishing fleet for their particular quota which made for a more efficient and therefore more cost effective approach to fishing the quota.

- 7.7 ITQ holders in joint venture arrangements were confident they were in control of their quota but recognised the importance of a good relationship with partners. Whilst there were circumstances where ITQ holders had negotiated favourable terms or used influence where needed (for example in arranging transshipment of vessels in Stanley as opposed to Montevideo), on the whole it was in the interests of the joint venture company to work together and make decisions that were in the best interests of the company. ITQ holders in joint venture arrangements were not in the mind set of 'wielding power' or forcing partners to take a course of action for the sake of proving they are in effective control particularly where this did not make commercial sense.
- 7.8 Some interpreted effective control in the sense of giving Falkland Island companies (and therefore Falkland Islanders) control over access to the fisheries resource, which is a resource of the Falkland Islands. There were examples of some companies restructuring in the lead up to ITQ in order to satisfy eligibility criteria which has led to the localisation of the company.

8 Active Involvement

- 8.1 One of the predominant reasons for the test of active involvement was to ensure non fishing companies did not acquire ITQ and then lease it to fishing companies. This has happened in other parts of the world operating similar systems where, for example, financial institutions have purchased ITQ as an investment and leased it to fishing companies. This resulted in the unedifying scenario of a fishing company paying a significant leasing fee to the financial institution (or other non fishing business) for the privilege of fishing the waters. Income to Government was lost, as was a great deal of influence over the fishery. In this sense, the test of active involvement was designed to ensure those who own ITQ are in fact involved in the business of fishing.
- 8.2 Some ITQ holders were exclusively involved in fishing activities while for others, fishing was just one part of their business. However most ITQ holders employed a specific person or people who were solely dedicated to the operations of the fishing company and in the smaller companies, the owner sometimes played this role.
- 8.3 Active involvement was interpreted by some slightly differently and some ITQ holders felt active involvement was similar to effective control. ITQ holders were actively involved at a strategic level, with involvement on a day to day operational level varying depending the size of quota and on the model used to fish the quota. Active involvement was different for those who chartered vessels as opposed to those who owned a vessel outright or with a joint venture partner. For example, those who chartered often did so because they felt it was the most effective and efficient way of fishing their quota, and these were often smaller ITQ holders where vessel ownership was not seen as a realistic option. They felt fully in control of their quota and could charter companies to fish it, including moving to a different vessel with relative ease which might be more modern and efficient. However, as they were chartering a vessel, opportunities for influence over crewing arrangements etc. were less than what would be the case in vessel ownership. Nonetheless this approach does demonstrate active involvement in that a clear commercial decision has been made locally in terms of how to fish the quota. Obviously other decisions that might have to be made where a vessel was owned, such as maintenance, replacement etc. was not

something that those who chartered needed to be involved in, although there was a case of an ITQ holder who had influenced changes to equipment on a vessel they chartered.

- 8.4 There were examples where those chartering vessels had been able to encourage the charter vessel to partially transship their cargo in Stanley. Influence in operations was more difficult for those ITQ holders who only had a small quota in the finfish fisheries with approximately three months fishing effort out of the year, with the vessel remaining on the high seas for the rest of the year. However, those ITQ holders did have active involvement and final say in some key decisions, for example, relating to sale price of fish.
- 8.5 In the case of no joint venture arrangements and full vessel ownership, ITQ holders were involved at all levels from catching, processing and selling the fish. In the case of joint venture arrangements, ITQ holders appeared to be in regular contact with partners regarding operations, meeting face to face at least annually and in the majority of cases at least two or three times a year both in the Falkland Islands and the country in which partners were based. Examples of issues discussed at face to face meetings include fishing strategy and plan (where, when and approach), vessel maintenance (in the case of ownership), review of previous season and planning for the next, reviewing accounts and budgets, longer term strategy for the joint venture company, potential investments, market performance, catch value, marketing strategy, buyers, transshipping arrangements etc.
- 8.6 During the fishing season, ITQ holders tended to have access to daily catch reports and Automatic Identification System (AIS) tracking information. Some ITQ holders had access to live stock information from warehouses/storage facilities in overseas countries. Some ITQ holders were involved with the vessels whilst fishing in Falkland waters, for example coordinating transshipments, bunkering and conducting the vessel agency function with regards to port entries, crew movement and local provisioning.
- 8.7 One ITQ holder stated they felt more actively involved in fishing under the ITQ system and had generally acquired more knowledge as a result. They suggested prior to ITQ, foreign partners had attempted to keep information relating to the running of the business, costs etc. a secret. However, the ITQ holder now had regular access and involvement in decisions relating to prices, the market, meeting buyers etc. This is indicative of the success of the ITQ system in enabling more active involvement of local firms in fishing activities.
- 8.8 In terms of crewing vessels where joint venture arrangements existed, this was often, although not always, the responsibility of the joint venture partner. For more senior positions such as the Captain of the vessel, ITQ holders sometimes had involvement although many Captains fishing in Falkland waters were heavily experienced and had been doing so for many years so turnover and need for replacement was minimal. There were examples where ITQ holders had been able to influence decisions affecting crewing arrangements, for example, one ITQ holder had received reports of a Captain operating in conflict with the rest of the crew and were able to take the evidence to the joint venture partner and insist the Captain was removed from the vessel.

- 8.9 Most processing took place onboard the vessel as the fish was caught. In most cases the product specifications were dictated by the demands of the market and it therefore made sense for ITQ holders to accept this rather than attempt to change specification.
- 8.10 Where joint venture arrangements or charter arrangements were in place, many ITQ holders commented that access to market, marketing and selling were the strengths that partners brought to the table. Often they had the contacts and distribution networks for the market which, in the case of Spain for example, was a tight market and difficult to break into and dominated by a few key players. It was felt potential alternative markets were limited and not as lucrative, and political interference from Argentina made communicating and investigating some markets problematic. For most Falkland Island companies in the industry, commercially it would be very challenging to carry out marketing and direct selling from the Falkland Islands due to costs, distance and time to market including logistics in terms of processing, storing and distributing the product. Partners have the expertise, experience and strong relationships already in place and it is often the case that when ITQ holders visit partners overseas, part of their visit includes a meeting with buyers of the product. One ITQ holder felt that direct selling was something to look into for the future, however they questioned the potential return on investment for effort in terms of the value it would add for the company.
- 8.11 There was however one exception to the rule, and a minority of other ITQ holders who were developing their business in marketing and selling through for example, investing into overseas cold stores and marketing companies, and in another case employing a marketing person. For one ITQ holder, this was part of a development plan with the intention that diversifying would also reduce the company's exposure to any further reduction in fishing effort. Some ITQ holders expressed concern that if this was an area FIG expected them to develop that they may be forced down a route that did not make commercial sense for their business, much like the previous fishing policy encouraged. An example given was that diverting money into a cold store, for example, would have a serious impact on their reserves and plans for vessel replacement.
- 8.12 One ITQ holder had attempted direct selling to a large UK retailer. However there were a number of difficulties to overcome including for example, price, certification of product and other regulations etc. which meant that this option was not viable at this time.
- 8.13 A number of ITQ holders had considered options locally, such as processing plants, but commented they could not see how this was a genuine option in the current climate. Barriers commonly mentioned (in addition to the logistics of product to market and time lag) included full employment, an inflexible immigration system, restrictive policy in relation to acquiring land and development and perceived political indecisiveness of FIG.
- 8.14 The financial data analysis (full report at Appendix 2) suggests that in many cases companies holding ITQ receive management fees from companies operating fishing vessels which is equivalent to quota access fees plus a percentage. The ITQ holders make payment to Government for the quota access fee, retaining a management fee. Based purely on the figures, these transactions could be seen as a form of leasing

quota access to a third party company – on figures alone it is not clear how much control the companies holding the ITQ exercise over the fishing industry or the extent to which they are actively involved. However, it is evident from the qualitative research that ITQ holders are very much actively involved in one or more of taking, processing or selling fish and to varying levels have control. This suggests it is not merely ITQ holders acting as a passive company through which outside fishing companies are accessing Falkland Island waters, but ITQ holders are capitalising and generating cash flow for reinvestment into the business.

- 8.15 Overall there is strong evidence of active involvement in the Falkland Island fishery. ITQ holders were involved in decisions relating to their companies and how quota was fished, marketed and sold at a strategic level. Active involvement on a day to day operational level varied according to the model employed to fish the quota.
- 8.16 The strength of marketing and selling experience and expertise, as well as distribution networks brought by partners was evident and appeared to be working for ITQ holders. This however requires an acceptance that large scale onshore activity in the Falkland Islands from fishing companies is unlikely to happen in the foreseeable future with the current challenging commercial environment in terms of cost, time and distance to market, distribution networks and labour constraints. However, some ITQ holders are exploring potential onshore activities where it is right for their business (and this will not be the case for everyone). Alternatively, FIG could consider assisting the industry to overcome some of the requirements and challenges faced although this needs to be considered in the context of scale of challenge versus the potential added value. ITQ holders may also perceive exploration of the potential to increase onshore activity in the Falkland Islands as pressure to channel their business down a route that does not make commercial sense for them at this time, as well as the added difficulty of finding themselves attempting to compete with their partners in an area that partners have well established networks and relationships.

9 Economic Efficiency

- 9.1 ITQ holders were aware of the economic efficiency test and recall providing data to the Fisheries Department in 2011. Economic efficiency was an area that required greater explanation in order for ITQ holders to get the most out of the test and was something they were interested in and would find useful for their companies. Many recall sending data but were unclear how it had been used, and almost all stated they received no feedback from the test, suggesting they were working on the assumption that their company must be performing satisfactorily.
- 9.2 The economic efficiency test looks at turnover/profit per unit of ITQ and also shows variation from the average. So if a company was a significant percentage, say 50% below average on profit per unit of ITQ, questions may be asked regarding their operations. The suspicion may be, for example, the foreign partner (in the case of a joint venture arrangement) may be inflating costs or fixing a low selling price so in essence the test was intended to deal with any gross abuses of that nature.
- 9.3 ExCo paper 258/11 discussed in detail the results of the economic efficiency test which was conducted on the Loligo fishery. It included the complexities and difficulties associated with the tests. At that time the tests were conducted and there were no serious concerns on performance. The ExCo paper was not published as

companies had concerns over how the information could be used and whilst company names were not used, the small number and information given made it possible to identify companies and therefore had implications in terms of commercial confidentiality. However, a presentation of the anonymous data was made to those involved at the time, which is at odds with the view that companies received no feedback.

- 9.4 What is evident from the Loligo example is that comparisons between companies within a fishery made sense, but comparing results across the industry as a whole is not appropriate (and some ITQ holders had concerns regarding this). As highlighted in ExCo paper 258/11, additional complexities such as multiple fish species, targeting of different fish will make comparison within the finfish fisheries difficult. Two companies targeting different species may both have viable strategies, but cost of sales data, turnover and price data may vary making a realistic comparison impossible. This is exacerbated where there may be few companies targeting different species and not enough companies to make a robust comparison.
- 9.5 Some ITQ holders had spent time attempting to work out rates of returns or economic efficiencies through publically available data as they felt the information is something that would be useful to them to see if they were operating efficiently compared to others in industry. However, this had proved difficult and time consuming. In a comparison test it was felt inevitable that some companies would perform better than others, but it was unclear how far would a company need to be behind the stronger performers in order for remedial or enforcement action to be taken, or what form this might take.
- 9.6 More transparency and explanation of the test of economic efficiency would be welcomed by the industry and would aid future attempts at measurement. ITQ holders felt it would be useful if the anonymous range of results were published in order for them to understand how they were performing against others in the fishery (though it should be noted that Director of Natural Resources delivered an anonymised presentation of the test conducted on Loligo to those companies involved in the fishery in 2011).
- 9.7 Consideration needs to be given to how the economic efficiency test can be conducted across the finfish fisheries given the complexities. Whilst those in industry would find feedback useful, consideration also needs to be given to how this information could be shared without breaking commercial confidentiality. A heavily redacted ExCo paper may render publication meaningless.
- 9.8 There were examples where ITQ holders had taken positive steps in terms of trying to make their operations more efficient. For example, as mentioned previously, one ITQ holder had reduced the number of vessels they used with their joint venture partners to catch their quota, another with their joint venture partner had reduced the tonnage of their vessel which meant it was able to change class which had an impact on efficiency and cost ratios, and there was an example of two ITQ holders sharing a vessel to catch their quota which benefitted both. Under the previous policy, the nature of the licencing system created division between companies and effectively prohibited the vessel owner from seeking additional fishing time with another company if there was spare capacity. The ITQ system has removed that level of

division and companies do not feel vulnerable or threatened if a vessel utilises fishing effort from more than one ITQ holder.

- 9.9 Some ITQ holders indicated there were some limitations in the way in which some fisheries are defined. It was suggested that some finfish ITQ holders might be able to improve efficiency of operations through amalgamation of some licence types and previously this has been proposed with some exploratory work on how this might be done completed. However, at the time, not all ITQ holders were in agreement with the proposals. At the point of considering what comes after the current ITQ tenure expires, this is something that should be revisited and reevaluated. An impact analysis should be carried out identifying potential impacts on companies and industry, and potential solutions identified which may alleviate concerns.

10 Anticipated Benefits of ITQ

- 10.1 With one exception, ITQ holders overwhelming agreed that the ITQ system was better than the system it replaced under the previous fishing policy. One ITQ holder described it as being 'transformational' for the Falkland fisheries. It has provided security for the sector and enabled companies to develop at a reasonable rate. The ITQ system has strengthened the position of the Falkland Island companies involved, given them greater control, negotiation powers and influence over the future of their company and (where relevant) their partners. ITQ has given increased security of access to the resource which is positive for those companies involved in the fisheries. However, potential new entrants could perceive the fisheries as 'locked down' and another barrier to overcome in terms of entry.
- 10.2 The introduction of the ITQ system and criteria that companies had to meet to be eligible for ITQ was seen as positive by most, putting Falkland Islanders at the forefront of one of the largest sectors and greatest contributor to GDP at the time of introduction. Some companies restructured in order to meet the relevant criteria and for some of those involved they expressed the view that the advent of ITQ has enabled them to become involved in the industry in a way that they would never have been able to manage under the previous fishing policy.
- 10.3 One of the key benefits to the ITQ system is the flexibility it affords. Not having the quota attached to a named vessel for example is of great benefit to companies. Should there be a failure or issue with a vessel the company planned to use, they are able to source another whereas under the previous fishing policy a company would in effect lose out as the licence and quota was attached to a vessel. The ability to trade fishing days from the quota is beneficial to companies with examples of ITQ holders in recent years both selling and purchasing days to the benefit of their company. So if one ITQ holder is unable to use all their days in the case of a vessel having a fault, another may be able to purchase those days which may use spare capacity on the vessel of another ITQ holder. It enables one ITQ holder to recover some of the cost from trading days, whilst another can potentially make their catch more efficient by using their additional capacity.
- 10.4 There was a concern by some ITQ holders that companies may be selling days every season and using this as a 'cash cow' to support other parts of their business and questioned the use of the resource in this way. There was one case where a small ITQ holder had terminated arrangements with their joint venture partner which meant

they were unable to fish their ITQ for the year. The current system requires trades of catch entitlement to be registered and is recorded by the Director of Natural Resources. Some questioned the need to strengthen the check where ITQ holders appeared to consistently trade days over the longer term. It could be argued that trading may produce efficiencies in that trades may allow one vessel to operate for most of a year instead of multiple fishing vessels taking the same fishing effort. Some ITQ holders may trade some of their finfish effort each year as it is not efficient for them to fish it themselves. This is potentially an area for clarification to ensure that ITQ holders are not consistently trading effort in the longer term without genuine reason, rather than fishing it themselves which would be in breach of the tests and against the spirit of what the ITQ was intended to achieve. There is a debate to be had about at which point an ITQ holder could be forced to permanently release their ITQ which may enable existing or new ITQ holders to better utilise that effort. However, the ability to trade catch entitlement if there is an exceptional reason is clearly beneficial, so any potential clarification of formal rules would need to be balanced to avoid becoming overly burdensome and make trading more difficult. The majority felt the current system afforded the right speed and flexibility to make decisions on trading quickly where dates are restricted to a prescribed season.

11 Research and Development

- 11.1 One of the anticipated effects of moving to a system of ITQ was that companies would invest more in research and development because long-term rights meant they would benefit from investments that had longer pay-off periods.
- 11.2 Some ITQ holders had conducted some research and development in terms of development relating to vessels to make them more efficient, developments in onboard processing, research into ways to further protect wildlife or developments relating to reducing wastage of bycatch.
- 11.3 Although some research and development has occurred, overall it has been relatively limited. This was also evident from the data analysis exercise (Appendix 2). Where ITQ holders had not yet conducted research and development, it was often the case that they had not had a need to conduct any at this stage, but planned to in the future as a need arose, potentially when it came to replacing vessels for example. Still in the first few years of ITQ, many companies stated they were building reserves with a view to having a 'pot' available for use for research and development as and when the need was required. One ITQ holder explained that because the fishing industry was volatile, reserves built up in a 'good' couple of seasons could easily be depleted when followed by a 'bad' season. This was just one of a number of demands on finances. Building reserves was a particular issue for the most recent entrants to ITQ, many of whom were servicing the ITQ purchase debt. Some of the smaller ITQ holders of finfish felt unable to invest in research and development as the extent of their holdings did not make it commercially viable. Some ITQ holders gave examples of where they had funded scientific posts with FIG, or Phd students to work with local research institutions to conduct research within specific fisheries or potential new commercial species and fisheries. One ITQ holder had invested extensively in research and development with a view to assessing the viability of a new fishery. These ITQ holders suggested funding posts, students and research into new fisheries is unlikely to have occurred without the long-term security and access to resource provided by ITQ.

- 11.4 Most ITQ holders were clear that since fisheries science had moved from Imperial College London, relationships with the scientists had vastly improved and this was a significant step in scientific terms for the industry. There was far more dialogue and communication; ITQ holders had greater buy-in and were therefore more assured by the information they were provided which meant they were better able to understand certain decisions, for example, if a season had to be shortened to protect the fishery. They also valued having access to scientists who they were available to discuss scientific issues with relating to the industry.
- 11.5 Several ITQ holders commented that whilst the science and research was good, there was still more to do and that in some areas there were still big gaps in the industry's knowledge such as oceanography, and information relating to breeding habits of various types of species for example, research into areas that would enable companies (and ultimately FIG and the Falkland Islands) to get more out of the fishery.
- 11.6 Overall the picture has been mixed in terms of research and development taking place as a result of ITQ. There has been some limited research and development and there has been an increase in dialogue between fishing companies, FIFCA and fisheries scientists since the introduction of ITQ.
- 11.7 Ability to finance, or willingness to finance research and development at this stage in some companies' development (and the need to build some reserves for this) appeared to be a recurring issue. In recent years FIG has explored the potential of tax incentives to encourage growth and development in other sectors of the economy. FIG could consider a similar scheme that offers tax incentives for research and development in the fishing industry. This should be investigated further.

12 Environmental Stewardship

- 12.1 It was anticipated that with ITQ, environmental stewardship would increase because fishing companies would hold valuable long-term rights to a proportional share of a fishery. All ITQ holders agreed that this was the case, although it was also recognised that environmental stewardship was good before the introduction of ITQ so development had been evolutionary rather than revolutionary.
- 12.2 ITQ holders suggested that there was more informal policing of waters by companies, with vessels more likely to report illegal fishing because of ownership of access to the resource. The improvement in dialogue with scientists, good research and longevity of access to the fishery has given companies greater understanding of the need for closed areas or shortening of seasons for example. There would not be the incentive for increasing environmental stewardship had the old fishing policy continued since companies took a short term approach as they were not guaranteed access to the fishery in future years. One ITQ holder suggested environmental stewardship around the world had on the whole improved, but ITQ has accelerated that process in the Falkland Islands, giving Falkland Island companies the confidence to increase sustainability in whichever way was required.

13 International Competitiveness

- 13.1 Another anticipated effect of ITQ was that international competitiveness would increase as poorly performing companies would sell rights to well performing companies.
- 13.2 There has been some, but limited trading of ITQ rights. ITQ holders were of the opinion that where sales of ITQ rights had occurred, this was due more to personal circumstance than because the company was poorly performing. For example, sales had occurred where ITQ holders had retired, or where the ITQ holding was so small it was difficult to make fishing the quota viable with the reduction in fishing days. The issue of poorly performing companies linked back to the economic efficiency test and the lack of detail and information ITQ holders had received regarding performance of their company in comparison to others operating in industry. It was felt by some that the economic efficiency test should be used as a tool to identify those whose rate of return was significantly poorer than other companies operating in the same fishery, and remedial action taken which could ultimately result in a poor performing company being forced to sell their ITQ to a company who could utilise that ITQ more efficiently and effectively. As discussed earlier under economic efficiency this is what the test is designed to do. At the time, although only conducted amongst Loligo ITQ holders, there was found to be no cause for concern. However, it is clear that industry felt the exercise lacked feedback and this was possibly due to reservations at the time over commercial confidentiality which has potentially led to misunderstanding of the use and applicability of the test. Feedback by way of an anonymised presentation was provided to those ITQ holders involved in Loligo at the time. Feedback to those outside of Loligo would not have been relevant other than in the case of any Loligo companies 'failing' the test which may have resulted in ITQ becoming available for purchase. However, there were no 'fails' at the time of the test.
- 13.3 Factors that affected international competitiveness are predominately the price of fish, fuel prices, volume and volatility of catch, and underlying costs - some of which are outside the control of the ITQ holder. Politics and political pressure from Argentina on foreign markets was also a factor that limited international competitiveness. Some felt the longevity of ITQ had increased competitiveness since it enabled companies to focus on developing the business without being distracted by protecting their licence position year on year.
- 13.4 On the other hand, another ITQ holder suggested the industry itself had made itself more competitive by making investments (into vessels where owned for example) in order to improve efficiency. This could be evidenced by the increase in catch despite the reduction in fishing days. The security of access to fish the resource has given ITQ holders the confidence to invest in their operations, however investments in the Islands has been more limited.

14 Collaboration and Cooperation

- 14.1 With the introduction of ITQ, it was expected that there would be increased cooperation between industry members on research and development, enforcement and environmental issues as companies no longer had to compete with each other for licences.

- 14.2 There has been increased cooperation between industry members overall, particularly with the establishment of FIFCA in 2007. The nature of the annual competitive application process for fishing licences under the previous fishing policy promoted a culture of non-communication and unwillingness to share information between companies. Because of the security that comes with ITQ, companies are now more willing to discuss certain aspects related to their business, the fishery, containerisation and catch for example, as the competitive element is removed. This is both informally and in more formal forums.
- 14.3 The establishment of FIFCA under the Fisheries (Conservation and Management) Ordinance 2005 has aided cooperation and collaboration and has been a clear success as part of the move to ITQ. All in the industry felt it was a useful body in terms of making representation to FIG as a collective, as well as funding some joint projects or programmes of work. The full time member of staff has enabled the organisation to be proactive rather than reactive. There was some suggestion that FIFCA was heavily Loligo dominated and sometimes some of the issues discussed, or visits organised were more geared to this fishery. However, it was recognised that the Loligo ITQ holders, often larger than finfish ITQ holders, paid proportionally more in membership fees and recognised this was the more valuable fishery. Additionally, interests of sectors of the fishery can be represented by sub-groups rather than FIFCA as a whole, particularly on operational issues. At times there has been a finfish sub-group for example.

15 Economic Performance

- 15.1 It was anticipated that ITQ could enhance the economic performance of the sector as fishing companies have security of access to the resource and flexibility in the way they decide to structure activities to take advantage of business opportunities.
- 15.2 There was a perception amongst most ITQ holders that ITQ has enhanced economic and financial performance of their companies and therefore the sector. It had given companies stability and security which has enabled companies to invest in their business and take some risks in a way they would not have been able to under the previous fishing policy, diversifying into other areas, for example, marketing. Some of those who held ITQ only in the finfish fisheries felt financial performance and profitability had been adversely affected by the sharp reduction in fishing days in 2011, and the price and demand for some types of finfish. Whilst ITQ had enabled development which had led to improved performance, one ITQ holder questioned the extent to which this development would have occurred anyway. They suggested ITQ had been an accelerant to enabling companies and industry to develop as opposed to *the reason*.
- 15.3 Whilst ITQ holders suggested economic and financial performance of the sector had improved to date, some alluded to the fact that domestic political decision making may start to adversely affect this in terms of limiting development opportunities. More than one reference was made to, for example, land at Gordon lines which the sector was keen to develop, but were reluctant to invest if they were unable to purchase the freehold of the land. However, these concerns were addressed in ExCo paper 144/14 where research showed that a standard lease of 99 years would be sufficient to enable a business to secure finance to make investment.

15.4 In terms of contribution to the Falkland Islands economy, the fishing industry (total, not restricted to ITQ holders) continues to make a significant contribution at approximately a third of total Gross Domestic Product (34.1% in 2012 – see table 1).

2007	2008	2009	2010	2011	2012
41.3%	43.8%	34.1%	39.0%	33.0%	34.1%

Table 1: Percentage of total Falkland Island GDP (at current and basic prices) for Fishing and Aquaculture

15.5 Whilst gross value added has an overall increasing trend, table 2 illustrates the volatile nature of the industry.

	2007	2008	2009	2010	2011	2012
Fishing & Aquaculture	£43.8	£53.1	£32.9	£66.6	£61.3	£67.7
Total GDP	£106.0	£121.2	£96.4	£170.8	£185.7	£198.4

Table 2: Gross value added/GDP at current and basic prices (Millions FKP)

15.6 Based on the data available, it is difficult to say whether economic performance of the sector has increased since the introduction of ITQ as there are no clear trends. GDP shows an overall slight increase although it also shows the industry is highly volatile.

16 Profitability

16.1 One of the anticipated benefits of moving to ITQ is that profitability of the sector would increase which would increase revenue to FIG through tax. Whilst many companies felt that economic/financial performance had improved under ITQ, they were not so confident regarding profitability. Many felt that costs associated with fishing the quota remained high and volatile which had an impact on profit.

16.2 Analysis of financial information provided by ITQ holders (the full data analysis supplement is at Appendix 2) suggests the Toothfish, Loligo and finfish⁵ have different profitability (see figure 1)

⁵ It is worth noting 'finfish' was not broken down by species and that prices do vary by species. The figures illustrated are therefore a calculated average and may conceal differences by species.

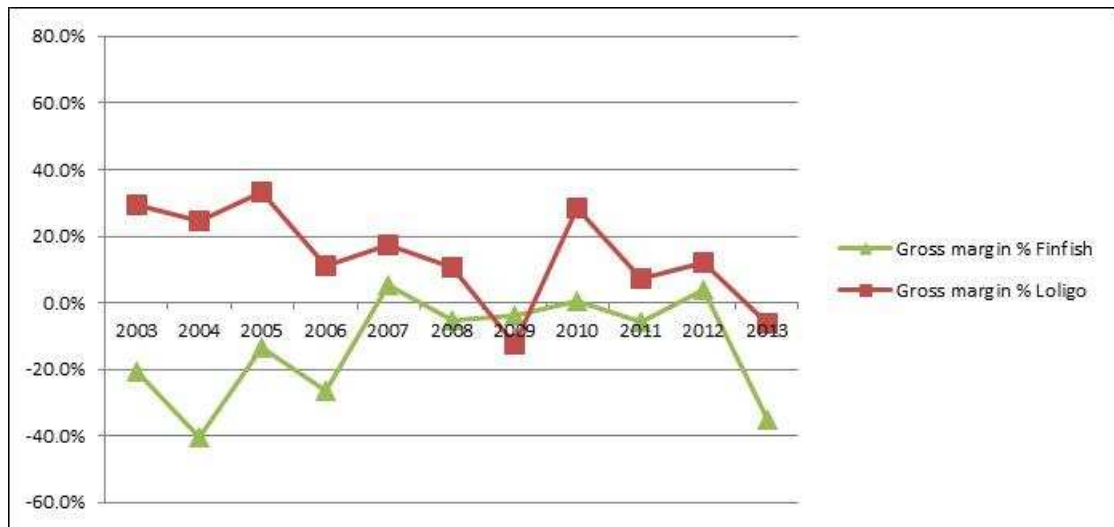


Figure 1: Gross margins by species [TOOTHFISH REDACTED] calculated from total catch value and total cost of sales (see Appendix 2).

- 16.3 Toothfish gross margins have increased to a good level mainly due to the increase in the market price of Toothfish. Loligo gross margins have overall decreased and in recent years been at a low or in some cases negative levels, mainly because Loligo cost of sales have increased at a greater rate than revenues. When measured by gross margin, profitability of finfish is poor despite some improvement since early 2000s. The data and graph show improvement from 2007 for finfish so it could be argued ITQ has improved gross margins and efficiency (although the figures remain overall poor). The large drop in 2013 is likely to be due to the Russian ban on rock cod imports together with an increase in cost of sales for this fishery. Analysis suggests reason to be concerned over profitability of the Loligo and finfish fisheries. This should be monitored over the coming years with a view to considering whether FIG can take any action to improve profitability in these fisheries if it continues to remain poor.
- 16.4 Figure 2 shows the trends in unit cost of sales for Toothfish, Loligo and the finfish fisheries based on data provided by ITQ holders. Cost of sales is predominantly made up of many external factors including fuel costs, labour costs, freight costs, harbour dues and vessel repair and maintenance (where vessels are owned). The only factor directly controlled by FIG is quota access fees.

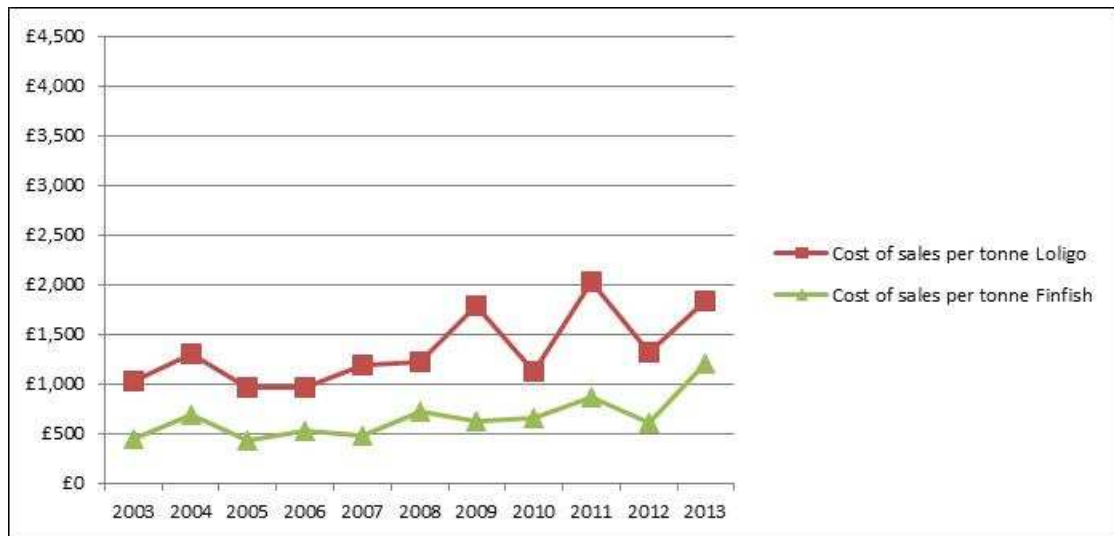


Figure 2: Cost of sales per tonne caught by species group [TOOTHFISH REDACTED] (see Appendix 2)

16.5 In relative terms, finfish cost of sales have increased the most over the period, and Toothfish the least. In the period 2003-13 Toothfish and finfish average prices have increased faster than the cost of sales per tonne, whereas the opposite has occurred in the Loligo fishery (figure 3).

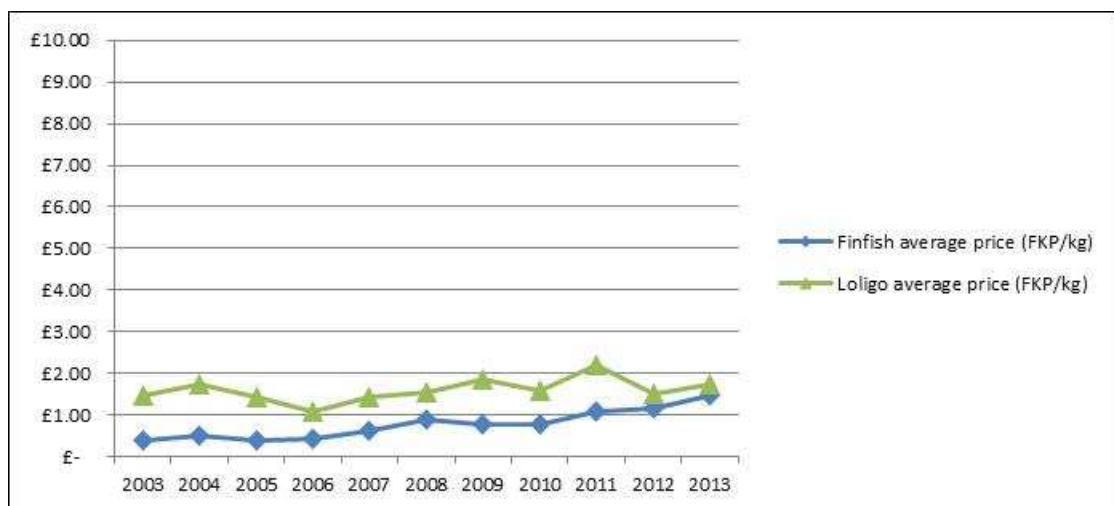


Figure 3: Average price of Finfish, Toothfish and Loligo [TOOTHFISH REDACTED] (see Appendix 2)

17 Diversification within the Fishing Industry

17.1 It was anticipated that diversification would occur into value added activities such as processing and marketing as companies could invest in assets other than vessels. As highlighted previously, diversification within the industry has been limited to a few ITQ holders although it is positive that there has been some evidence of it in the first few years of ITQ. Whilst one company was pursuing development of a processing plant in the Falkland Islands, others had not followed this route due to the barriers including logistics, full employment, immigration policy, land policy etc. which were perceived to be too difficult to overcome at this stage in the development of their business, especially when this was part of the expertise brought to the table by partners who already had access to the market and distribution networks.

- 17.2 As mentioned previously, many felt marketing and selling was something that was too difficult and expensive to pursue from the Falkland Islands at this stage of development in their business, although there were limited examples where ITQ holders were pursuing or had ownership in this side of the operation. Those that had gone down this route felt this would not have been the case under the previous fishery policy but ITQ has given them a longer term perspective; the security has enabled them to take a risk and they know they have time to get established and make it work. It also had the benefit of reducing reliance on purely fishing which could be volatile. Most ITQ holders were content with the arrangements in place for marketing and selling their fish, which was on the whole done by partners in the country where the demand for product was. Some ITQ holders felt this could be an area for potential future development but did not want to invest or divert money into these activities at a time when they were still building reserves and had other future potential investments to consider, such as vessel replacement for example.
- 17.3 Views were mixed with regards to whether this was an area for FIG support in terms of promoting the Falkland Island fishery internationally. ITQ holders did their own promotion, sometimes with FIFCA, through international fish shows and marketing with their partners and this worked well; it was best coming from industry. Some referenced examples such as New Zealand where Government had assisted industry. This is potentially an area for further investigation and FIG should explore this with FIFCA to see whether this would be welcomed or not by industry.
- 17.4 There were examples where some ITQ holders, and it tended to be (although not always) those involved in the finfish fishery, had sought to diversify into other non ITQ fisheries and develop their business in this area alongside ITQ. They had used leverage of currently being an ITQ holder, which brought a reputation of experience and involvement in the Falkland Island fisheries to attract partners to work together in the Illex fishery for example. Any profits from this fishery go back into the company reserves ready to invest in development opportunities when the time is right. It was seen as a potential development opportunity particularly given the limited opportunities for development in ITQ where quota was not being traded. Another ITQ holder had diversified activities through supplying their catch of Illex to the local Toothfish operator which was mutually beneficial to both companies as a better price per kilo was achieved by the seller, with the Toothfish operator also getting a better price and fresher product than through importing the bait.

18 Increased Opportunities

- 18.1 It was anticipated that the ITQ system would lead to increased opportunities for development in the sector for new and existing ITQ holders, as well as providing opportunities for existing ITQ holders in other sectors.
- 18.2 As described above, some ITQ holders have become, or are in the process of becoming involved in other opportunities within the fishing sector such as marketing. Some ITQ holders have taken opportunities to become involved in other sectors, for example, property, tourism, hydrocarbons, retailing, warehousing etc. However, it is not clear that ITQ was *the* reason for development into other sectors; some argue it would have happened anyway. What is more certain is that ITQ has given ITQ holders security over access to the resource which has enabled them to be more flexible, plan longer term and follow up investment opportunities rather than focusing on attaining

a fishing licence for the next season. ITQ has most definitely been an accelerant in terms of ITQ holders taking up other opportunities.

- 18.3 ITQ holders that had taken advantage of other opportunities had in some cases done so in order to reduce their risk and reliance on the fishing sector, which was seen as volatile and high risk. Capitalising on opportunities in property or tourism related activities for example, was seen as low to medium risk. Income from fishing activities was sometimes used to develop and invest into other parts of the business.
- 18.4 Some ITQ holders felt there were further opportunities on the horizon that they would like to pursue but were cautious in the current climate. They suggested that ITQ gave them security, however political decisions relating to infrastructure, land policy and development were perceived to be stifling opportunities, and decisions in the company relating to investment had been put on hold. A perception of continual change in FIG policy decisions gave the industry no confidence to commit to investment and development.
- 18.5 Some smaller ITQ holders agreed that ITQ had given them more flexibility to structure their activities and some had tried to follow up other opportunities. However, in reality, due to the size of their holding and the lack of ITQ available to purchase they were restricted in terms of being able to take up new opportunities despite wanting to.
- 18.6 Overall it would appear there have been some increased opportunities both internally and externally to the fishing industry because of security over access to the fishery. Some have taken up perceived lower risk opportunities such as property and tourism, and others higher risk opportunities within industry. However, there is reluctance for some companies to follow up some opportunities because of the perceived risk posed by FIG policy and political decision making. Despite having more flexibility to structure their activities, opportunities are limited for those who have small ITQ holdings.

19 Finance and Purchasing ITQ

- 19.1 Prior to introduction of ITQ there was debate about whether initial ITQ holdings should be allocated on a 'free' or charged basis as it was seen as a valuable commodity. Original ITQ holders do not see the resource as being 'given' to them, more it had been 'earned' based on investment into their fishing businesses and adhering and complying with the requirements of the previous system. A decision was made to allocate ITQ free of any charge in the first instance but an annual quota access fee would be levied with onward sales subject to capital gains tax).
- 19.2 Although limited, there has been some trading of ITQ holdings to date. Those that have purchased are still servicing the purchase debt and this obviously has financial implications in terms of profitability and current investment capabilities.
- 19.3 Access to finance varied by company. Due to the limited trading, most ITQ holders had not needed to raise finance for the acquisition of ITQ. Where trading had occurred, finance mainly came from joint venture partners. Finance from the local bank was not an option due to lack of security, and most ITQ holders perceived that ITQ would not be seen as a significant enough or tangible asset to raise the required finance with the local bank, particularly with the reducing tenure.

- 19.4 One ITQ holder had been able to use their ITQ as part security against finance from the local bank for further investment by the business. Others had not been able to, and felt the ITQ in itself would not be of adequate value as security for larger investments such as, for example vessel replacement. ITQ holders tended to raise finance through joint venture arrangements and/or specialist fishing banks. There is a concern that ITQ holders may not be in effective control by allowing joint venture partners to dominate by virtue of being the financiers. As indicated previously, in a number of cases where foreign partner finance has been used, a clear debt repayment schedule has been requested by the Director of Natural Resources, together with a clear indication that the ITQ holder has the right to sell the ITQ at anytime. In other cases ITQ holders appeared to be able to negotiate arrangements from a relatively strong position. One ITQ holder alluded to the fact they were often approached by potential new partners seeking to fish in Falkland Island waters which their joint venture partners were aware of and this strengthened the local company's position. Others alluded to regular negotiations which put them on more favourable terms.
- 19.5 Whilst there is clearly a strong level of influence and negotiation ability which appears to have strengthened since the onset of ITQ, and ITQ holders in joint venture arrangements are able to get to a position they wanted to be, arguably this is not by definition control. However, ITQ holders with partnership arrangements highlighted that partnership arrangements are that, and often they had strong relationships with partners and it was about both parties making decisions on what worked best and was in the best interests of the company. However, ITQ holders must be in control of their ITQ rights and this should continue to be monitored.
- 19.6 Although there appeared to be some issue with obtaining finance locally, it did not currently appear to be preventing investment and development as finance could be obtained elsewhere, although perhaps it did not encourage development as much as could be the case. In some cases, companies could use reserves or money that had been put aside ready for investment. ITQ holders did not feel finance was a barrier in terms of purchasing ITQ. Finance may become an issue in terms of large capital investments in the future, for example when companies have a need to replace fishing vessels. FIG is currently in the early stages of investigating a local investment strategy and this is something that could potentially be fed into that process for consideration.
- 19.7 ITQ holders were asked if they felt any restrictions on sources of finance to purchase ITQ should be in place in order to prevent a company from giving up some of its effective control in order to finance a deal. ITQ holders evidenced this has not been the case and to restrict access to finance would be dangerous and potentially damaging to both the fishing industry and FIG because transactions would not take place. It could be interpreted by industry as Government restricting potential for growth and development and interfering in private sector development.
- 19.8 There was a suggestion from one ITQ holder that whilst companies over time negotiate more favourable terms and potentially increase their ownership of joint ventures (where they existed), the nature of the industry would never enable total buy-out of foreign partners. As ITQ holders sell their ITQ, potential buyers have to find finance in order to transact the deal. That ITQ holder may not have enough reserves

in the business, or be unable to access finance through a local bank and usually have to look to a foreign partner to finance the deal, so the cycle was perpetual. This emphasises the need for a robust effective control test.

- 19.9 It was felt that finance was not a barrier to entry into the ITQ system, but more the fact there were limited opportunities to purchase because trading of ITQ holdings had been limited. Some also questioned the ability of potential new entrants to compete with existing ITQ holders looking to increase their portfolio, who were more experienced and had an established company, arrangements and relationships in place.
- 19.10 The majority of ITQ holders stated they would increase their ITQ portfolio if the opportunity arose (although this was subject to aggregation limits). Loligo was the most sought after ITQ as this was perceived to be the most profitable, and this perception makes it the most valuable. Finfish is perceived as much more marginal and less profitable, particularly as quota has been reduced over recent years. One finfish ITQ holder referenced a purchase of further finfish ITQ and the fact this had not increased profitability or growth of the company; it had merely countered shrinkage and enabled them to continue 'treading water'. Another ITQ holder who owned both Loligo and finfish ITQ commented that Loligo was the more important part of their business and they had always struggled to make the finfish ITQ profitable which is why they had not invested further in this side of the business (by pursuing vessel ownership for example). Many ITQ holders operating in finfish suggested the cut in fishing days in 2011 had significantly impacted their business and although they could understand the reasoning behind the decision, found it frustrating for their business. This is partly the reason that some operating in finfish charter vessels to fish the quota (either directly as the ITQ owner or with a joint venture partner).

20 Aggregation Limits

- 20.1 Views on aggregation limits understandably varied according to the level of ITQ holding. Overall, most viewed aggregation limits as a good thing and most felt the limits were fair and set about right. Some argued that imposing limits prevented stronger companies making more effective and efficient use of the quota and prevented companies close to the limits developing their business further. Others felt aggregation limits prevented monopoly situations with one company dominating, becoming stronger and using their profit and manipulating margins and squeezing other local companies out of the fishery. Aggregation limits enable more ITQ holding companies to grow and develop and it retains an element of competitiveness in the industry which ensures companies do not become complacent. Some felt it spread the risk for both the industry (and Government) in terms of having multiple ITQ holders operating under different models with different arrangements. One ITQ holder suggested that having one ITQ holder fishing the entire quota in a fishery posed a risk in that if something unforeseen were to happen with that company, ultimately the whole economy could potentially suffer. Some empathised with those close to the limits as they could appreciate it may appear to limit their potential for growth, however this paved the way for ITQ holders to do other things and diversify within the industry (as has been the case for some).
- 20.2 As has been highlighted, many felt the finfish fisheries were much more marginal. It was suggested that as the fishery becomes smaller, there should be a point when

aggregation limits in the finfish fisheries are reviewed. It was felt that by having a greater ITQ holding in finfish, companies could become more profitable and are therefore enabled to develop the business further and make more investment. However, it was felt this still would not get around the main issue which was the lack of trading of ITQ holdings. It was questioned whether this would encourage trade of ITQ further as companies looked to grow, although there would still be the potential for monopolies to develop.

- 20.3 More transparency and definition is required regarding aggregation limits. Aggregation limits are published in the Falkland Islands Gazette and are transparent in this sense, but for newer entrants especially, the technicalities around aggregation limits were not always clear. For example, the Toothfish fishery (a smaller volume fishery), is fished by one company with 100% ITQ holding and the reasons for this were not clear for some ITQ holders. Clarification would also be useful with regards to a person belonging to the Board of more than one company where both companies hold ITQ rights.
- 20.4 Overall, aggregation limits are an essential tool to prevent monopoly abuse and are set at the right levels. An exercise should be carried out either by FIG or through FIFCA to explain aggregation limits and the technicalities around them as a way of assisting those newer to the industry. FIG could reconsider aggregation limits levels in the finfish fishery; however this has the potential to develop monopoly situations and reliance on fewer ITQ holders. It however, would not necessarily encourage trading of ITQ rights which is perhaps the greater issue.

21 Barriers inherent within the ITQ System

- 21.1 ITQ holders were asked if they felt there were any barriers to performance of their companies inherent within the ITQ system because of the way it was designed. Almost all ITQ holders referred to the length of tenure and where it was not an immediate issue for some ITQ holders, they felt it would be in the next couple of years, particularly once the life of the ITQ dropped below 15 years. The continual reduction in tenure meant that the value of the ITQ was continually declining, trading would become more difficult and it had implications for large future investment. For example, several ITQ holders referenced vessel replacement. ITQ holders would be reluctant to invest in a vessel which they could use to fish their quota if they only had the rights to fish for a period significantly less than the life of the vessel. The reduction in tenure also has implications in terms of access to finance, and companies would become more reluctant to make investment and look to develop if they have uncertainty beyond 2031. This argument does hold some merit in relation to investments which are typically long term in nature; however there are a small number of companies who have made significant longer term investments including the purchase of a new vessel which indicates at this point in time in the life of ITQ, it is still viable.
- 21.2 Many ITQ holders felt ITQ rights should have been allocated on a perpetual basis, although some ITQ holders understood why they had not been. What was unanimous though was the need for FIG to consider now what will happen beyond 2031 (whether that is extending rights for another 25 years or in perpetuity) so that ITQ holders could plan for the longer term. A decision will be required on this issue within the next five years and consideration will need to be given to whether rights should be

extended for another fixed period or offered in perpetuity. A discussion will also be required on whether rights should be allocated free (accepting the annual costs associated with the quota access fees) as per the current arrangement, or via a new mechanism for extracting resource rents. There will be a trade-off for FIG in realising the value of ITQ versus the negative impact that charging an additional 'purchase fee' may have on companies' ability to make further investments in their business or the Islands.

22 Application of ITQ in other fisheries

- 22.1 There was a range of views regarding the ITQ system potentially being applied to other fisheries within the Falkland Islands. Most felt it would be a positive step to introduce ITQ to the Illex fishery as currently industry and FIG do not get as much revenue, or have as much control over the industry as could be the case. However, it was recognised that the Illex fishery is volatile, complex and is currently fished by vessels from the Far East who operate differently from those that most ITQ holders are currently involved with. There was also a view that the current licencing system was lucrative for FIG and perhaps changing this could pose a significant risk, although providing the detail had been worked right there could be many more benefits for industry and FIG, and assist growth in other areas such as containerisation. However, this too would require support across industry in terms of commitment to use such facilities.
- 22.2 There were concerns that the Illex season was quite short which could pose difficulties for joint venture relationships, with the partner viewing time in the Falkland Islands as just one small part of their business. A local company could purchase a vessel, but this would result in the vessel being idle for most of the year unless it were able to fish in other waters, but politically and practically this would be difficult.
- 22.3 Those ITQ holders already involved in the Illex fishery with their business welcomed the idea of moving to ITQ as it would give them the security afforded in other fisheries. However, time needs to be spent working out the detail of how it could work. For example, Illex licence fees are expensive at approximately £100,000 each and pose a significant outlay upfront. Under ITQ arrangements, if someone had the rights to 20 licences, would they be expected to pay £2 million at the outset each year or could payments be staggered? Currently, in most ITQ fisheries, ITQ holders generally pay after they have caught the fish or at least it is on a schedule which makes that likely. The same could be done for the Illex fishery although there might have to be some restrictions in relation to security of payment. Currently the system of refunds works well if there are no fish and it was felt that if Illex moved to the ITQ system, a similar mechanism would have to be carried forward and incorporated. There was concern expressed that, for example, Taiwanese or Korean companies/vessels can be quite difficult and that depending on performance of one season, they may not return the next. Would an ITQ holder be liable to pay licence fees if a vessel did not turn up? One ITQ holder suggested based on previous experience, Far Eastern companies were not keen on entering joint venture relationships. Often priorities were different for Far Eastern companies, for example, it was suggested Koreans were often reluctant to invest in vessels. However, what is not known is whether this would change if the only way they could fish Falkland Island waters was through a partnership with a local company.

- 22.4 If Illex were to move to ITQ these issues would need to be considered in the context of the existing 'tests'. For example, fishing companies would need to put in place arrangements to ensure partners return year on year which they could do if they had effective control. There will be some risks for both FIG and fishing companies but these should be considered in the context of potential reward for both. Having overseas partners locked into arrangements with local partners is also more likely to ensure continuity. For example, historically there had been a situation when a significant number of Japanese vessels fishing Falkland Island waters were able to leave almost overnight and move to Argentina as there were no ties or assets in the Falklands that could not be severed easily.
- 22.5 There were concerns regarding how the initial allocation of ITQ rights would be made. Those already in the industry felt it fair that a system similar to that used previously for allocation of ITQ rights be used, though this would essentially gift the inherent value of the ITQ to a small number of companies. Aggregation limits would need to be imposed as there was a concern that some companies could end up dominating the fishery.
- 22.6 Despite concerns, the majority felt that Illex could work under a system of ITQ. It would potentially involve some risks, and the detail would need to be carefully worked out. There would need to be a system put in place to reflect the nature of the fishery e.g. short season, volatility etc. although to an extent this also applies in the Loligo fishery. However the reward for industry, FIG and ultimately the people of the Falkland Islands could be greater than now, as well as bringing local companies to the forefront of the fishery. One ITQ holder suggested Illex is now in the position that the Loligo fishery was in prior to moving to ITQ, and that FIG should make the decision and start actioning it now. The previous allocation mechanism could be a starting point although other factors may come into play, and this would need to be consulted on with industry. It is also possible that before moving the fishery to ITQ on a permanent basis, trials should be conducted first and the Government should support and work with industry to do this.
- 22.7 One ITQ holder was granted an additional exploratory licence and used their quota as a way to determine whether a Grenadier fishery could be established. Grenadier would potentially be a small fishery and whilst there is the potential for an emerging Grenadier fishery, concerns were expressed on the impact of another fishery, namely one of the more valuable, the Toothfish fishery. Currently the ITQ rights for Toothfish are fished using a longliner vessel which means the product holds more value. Toothfish is a bycatch of Grenadier and if caught by trawler, ITQ holders suggest the product tends to be of a lower quality and is valued at significantly less. Exploratory research suggests the potential for a new Grenadier fishery. However, this has the potential to negatively impact the Toothfish fishery. The addition of a new fishery, potential additional economic benefit, potential for one or more companies to increase their fishing operations would all be positive. However, an impact analysis should be conducted to determine the potential benefits against the potential negatives on the Toothfish fishery (e.g. bycatch issues), any potential negative impact (against positives of Grenadier), potential impact on FIG revenues, and potential impact on Marine Stewardship Council (MSC) accreditation of Toothfish. This would enable future decisions on Grenadier as an additional fishery to be informed based on evidence.

23 Barriers to Development of the Fishing Industry

- 23.1 ITQ holders mentioned a number of other factors they felt were barriers to growth and development of their business, although these were not linked to the way the ITQ system is designed. Those frequently mentioned can be summarised as lack of infrastructure and perceptions of political indecision by FIG.
- 23.2 Many felt political indecision (or lack of timely decisions) from FIG was stifling economic growth of business in the Falkland Islands. For example, some ITQ holders who were considering investment into cold storage (of which it was felt there was a shortage), warehousing or processing sites had put decisions on hold. The potential port and land policy were highlighted as examples. The changes in decisions regarding the port and land policy meant companies lacked confidence and it posed too great a risk to commit to investment when decisions might be reversed before a project could get started or completed. Some smaller companies referenced land at Gordon Lines being prohibitively expensive (when available for sale) and available in too large plots which meant if they did choose to go down this route, they might be able to secure a site but then be unable to develop it. Many felt if Government made a commitment to a port or other infrastructure, companies and the private sector could start to plan and invest in developments around this.
- 23.3 FIPASS played an important role for many ITQ holders in terms of transshipping and containerisation, and they acknowledged the recent commitment to investment by FIG which would help in the short term. However, there was a strong feeling that port development and infrastructure must stay on the Government agenda because regardless of whatever happens with hydrocarbons, there will always be a fishing industry and tourism industry to develop and support the economy.
- 23.4 The current status of FIPASS was described as manageable although there were sometimes issues around timing and berthing of vessels for off loading, available space for transshipping, access onto FIPASS in poor weather and hygiene issues relating to the surface and mix of tourists, cargo and food products all using the same space.
- 23.5 Some ITQ holders suggested Government could do more to support the growth of containerisation which would in turn develop the economy through development of infrastructure projects, additional employment and additional revenue. To do this the Government needed to act as an enabler (some argued they were currently not) by making decisions in an efficient manner, and allowing companies to invest and develop projects which were currently perceived to be restricted by certain Government policy and decisions.
- 23.6 Some ITQ holders felt Government could support containerisation by making it a requirement for all ITQ holders to containerise at least some of their catch in the Falkland Islands. In order to do this however, support would be needed for marine infrastructure or more improvements to existing infrastructure since it was questionable whether existing infrastructure would be able to cope. Conversely, some ITQ holders were strongly opposed to such obligations especially where it could have an adverse impact on profitability and felt that companies should be able to make

decisions of an economic nature to suit what was in the best interest of their business.

24 Other Issues

- 24.1 A number of issues were raised by ITQ holders which do not relate directly to a review of ITQ. However, due to the frequency with which they were raised, the key areas are briefly mentioned.

Patrol and Policing of Falkland Island waters

- 24.2 Many ITQ holders raised policing and patrol of the Falkland Island waters as an issue, although this is a common observation amongst fishing companies operating in waters the world over. They felt licence/quota access fees were high and this could be invested back into the sector in the form of improvements to patrol and observer days. It was recognised that fisheries staff and observers do a good job, but more of them are required. Many felt the reputation of the Falkland Island fishery was at stake and this was particularly a concern for those who had MSC Certification.
- 24.3 Whilst the Falkland Islands currently had a reputation as a clean, sustainable, well maintained and managed fishery, some ITQ holders felt going forwards with the advent of hydrocarbons the spotlight might turn on the Islands fishery. ITQ holders suggested that many fisheries across the world have up to 25% observer coverage (and in South Georgia it was 100%) and that the 5-7% coverage here may seem inadequate. The suggestion was that more observers would mitigate and show the industry is making more effort to protect its fishery.
- 24.4 Some ITQ holders expressed frustration and felt that anecdotal evidence of illegal fishing was not taken seriously or investigated. Some ITQ holders felt the current patrol vessel was not adequate and alone was not enough, however, there is little evidence to support this. ITQ holders felt more could be done in terms of air patrol which included the element of surprise. One ITQ holder suggested an opportunity for closer working with the military who may be able to use the opportunity as a form of exercise. ITQ holders recognised there would be costs associated with increased air patrol, although they felt it would only need to be carried out a few times which would be enough of a warning for anyone illegally fishing in Falkland waters.

Licence/Quota Access Fees

- 24.5 It was suggested by some ITQ holders that development of the fishing industry had been slower than anticipated due to the high costs of quota access fees. It was recognised that there had not been an increase in recent years but for some in the finfish industry, the reduction in fishing days meant the quota access fee per tonne of catch had increased significantly. There had not been a reduction in quota access fee corresponding to the reduction in number of fishing days so although fees remained static, there was an increase in costs in real terms. However, cost of sales has increased and quota access fees are only one component of this. Most factors are external to FIG control e.g. fuel costs, labour costs, vessel maintenance and repair etc. Most ITQ holders felt that once revenue from hydrocarbons starts to have an effect, the fishing industry should be rewarded for being the mainstay of the economy by having reduced quota access fees and ultimately they should be eliminated.

Nonetheless FIG needs to be mindful that the fish in Falklands waters belong to the people of the Islands (not the fishing companies) and it is the Islands as a whole that should benefit from their exploitation.

- 24.6 There was a perception of unfairness in the past in terms of increases in fishing licences/quota access fees with different percentage uplift being applied to different fisheries. It was felt that those with the more valuable fish were penalised with higher increases in fees. ITQ holders also suggested that when the industry had a bumper year in terms of fish catch, FIG did not take into account that this often resulted in a sharp drop in the value of fish, so while there was more fish, overall the value was less but often licence/quota access fees would be increased regardless. However, FIG now use a rolling average of three year catches so big peaks or troughs are smoothed. The target on fees was 10% fee/revenue so the frequency and scale of any fee change depends on how far a company was from the target. In practice, little has changed in recent years.

Vessel Replacement

- 24.7 Some ITQ holders suggested vessel replacement was a major issue facing the industry in the coming years and some felt this was an opportunity for FIG to assist the industry. Much of the existing fleet was purchased off the back of European Union Decommissioning Grants and it was felt any sort of similar scheme was unlikely to come up in the future. Those vessels currently owned by ITQ holders or joint venture companies were at different stages of their life and so some would require replacement before others. Some ITQ holders had plans in place for vessel replacement, referenced it in their business plan and were retaining funds within the company specifically for this purpose. Some ITQ holders felt Government should look to invest locally rather than continue with overseas investments and suggested a range of options from providing loans through to match funded grants to the industry. It was however recognised that vessels were expensive and it would be unrealistic to expect Government to fund replacement of the entire fleet. As mentioned earlier, this is something that FIG could potentially consider as part of a local investment strategy if one is developed.
- 24.8 There were a mix of flagged vessels operating in Falkland Island waters. ITQ holders suggested that while the previous fishing policy encouraged vessel ownership there was currently no incentive or benefit to owning a Falkland Island flagged vessel. There were no reduction in harbour fees or reduced tariffs whilst in the Falklands and often it created further difficulties to overcome when the vessel was sailing into overseas or European ports for example. International political influences also caused issues with some countries not recognising the Falkland Islands by stating it was a disputed territory. There were advantages to owning a Spanish flagged vessel for example, as often there were fewer inspections at Spanish ports, less paperwork and easier access to European markets. However, one ITQ holder raised a concern that the Falkland Islands fishery reputation could be at stake if it was seen to be fished by many foreign flagged vessels. Contrary to that was the view that it was not an issue if local people and businesses were involved to the extent that they are. The promotion of Falkland interests in the design of the ITQ system is also consistent with maintaining a modern, efficient and well run Falkland's fleet. Measures should be encouraged to ensure a significant proportion of Falkland fish catches are taken by Falkland vessels.

25 Conclusion

- 25.1 Assessing the overall impact of ITQ is not straightforward due to the variety of different company structures, different levels of ITQ holdings, different approaches used in the exploitation of ITQ and varying marketing conditions for different species of fish. That said the ITQ system has delivered tangible benefits to the Falkland Islands and companies involved in fisheries. It has given security to companies which has enabled them to plan and develop their businesses and take a longer term view. However, as this report has highlighted, the extent to which ITQ is achieving all of its intended effects is mixed.
- 25.2 On one hand, ITQ is still in relatively early days in terms of some companies having reserves available to make capital investments, or investment in research and development for example. On the other hand, the current tenure of ITQ is reducing which also has an impact on long term investment and planning and is a concern for ITQ holders. A decision on what happens after the current term of ITQ expires is required within the next five years. Consideration is required on whether rights should be extended for another fixed term period or in perpetuity.
- 25.3 Levels of trading in ITQ holdings has not been as great as many expected, but the ability to trade days has been a great benefit to many in the industry. The longevity and security of access to fish the resource has enabled some companies to follow up opportunities both within the fishing industry and in alternative industries, which has enabled them to offset some of the volatility associated with fishing. To an extent, this depends on the level of ITQ holding.
- 25.4 It is clear greater clarity, definition and explanation of the test of effective control, active involvement and economic efficiency is required which will particularly benefit those who are newer to the industry.
- 25.5 Collaboration and cooperation amongst ITQ holders has improved significantly since the introduction of the ITQ system as companies are not competing on an annual basis for licences. This has been enhanced by the establishment of FIFCA which is seen as a valuable organisation from both the point of view of industry and FIG.
- 25.6 Overall there are some positive findings in terms of the impact of ITQ to date, although some areas of concern remain as highlighted in this report, and some immediate actions could be taken to address specific points of detail. Arguably there has been a significant cultural change. The fishery is seen as here to stay and under the control of Falkland Islanders, and is no longer seen as transient. This could lead to further investments and developments, more jobs in the industry and this also strengthens the case for revisiting the issue of the reducing of tenure of ITQ sooner rather than later. At this stage, any more fundamental changes to the ITQ system would be premature as the introduction of ITQ is relatively recent and the longer term impacts have yet to have had sufficient time to fully materialise.
- 25.7 The ITQ system attempts to move away from the old fishing policy which many felt too restrictive and controlled by FIG, led to uncertainty and stifled development opportunities. This appears to have happened. However, there are a number of areas, for example, the three tests, trading of catch entitlement, finance etc. where there is a suggestion of more clarification or intervention by FIG. These are highlighted in the

recommendations and should be developed by FIG with industry to ensure the best outcome for the Falkland Islands and management of the resource.

26 Recommendations

The following recommendations are based on the findings of the review. In each case a lead person has been identified to progress actions. Where appropriate these should be developed using a collaborative approach between FIG, FIFCA and the industry.

- 26.1 Develop and provide clarification of the definitions for the tests of effective control, active involvement and economic efficiency, as well as provide explanation of the consequences of non-compliance of the tests (FIG Fisheries; Policy Unit).
- 26.2 Develop the economic efficiency test for fisheries other than Loligo (FIG Fisheries).
- 26.3 Develop a feedback mechanism for the economic efficiency test that ensures commercial confidentiality, but provides feedback to ITQ holders on performance within the fishery (FIG Fisheries).
- 26.4 Monitor profitability of the fisheries over the coming years. If finfish and Loligo continues to demonstrate poor profitability, consider options that could improve profitability (FIG Fisheries; FIFCA).
- 26.5 Develop definitive rules and procedures regarding the trading of catch entitlement to increase transparency and avoid potential situations of long term (persistent) 'quota leasing' which is against the spirit of the ITQ system (FIG Fisheries).
- 26.6 Review policy options and implications with regards to how ITQ rights should be allocated after the current tenure of ITQ expires. A firm decision is needed within the next five years. This must include consideration of whether rights be allocated for a fixed term or in perpetuity (FIG Fisheries; Policy Unit).
- 26.7 At the time consideration is given to the next allocation of ITQ rights, the potential amalgamation of some finfish licence types to improve efficiency be revisited, along with aggregation limits for finfish (FIG; FIFCA).
- 26.8 Develop proposals for tax incentives for ITQ holders in relation to research and development investments (FIG Fisheries; Policy Unit).
- 26.9 Develop proposals to include fishing related capital investments in the emerging local investment strategy (FIG Treasury).
- 26.10 Assess the level of appetite amongst industry for FIG to increase support and proactive promotion the Falkland Island fisheries internationally. A firm conclusion is needed as to whether this should remain an objective of the Economic Development Strategy (FIFCA).
- 26.11 Hold a Presentation/Q&A session for interested parties in the fishing industry explaining aggregation limits and the technicalities around them (FIG Fisheries).

26.12 Develop proposals for other fisheries to enter the ITQ system:

- a) Revisit and progress work to date on proposals for Illex to enter the ITQ system (FIG Fisheries)
- b) Develop proposals for a Grenadier fishery taking into account the potential effects on the Toothfish fishery (FIG Fisheries)

27 APPENDIX 1: Terms of Reference

1.0 Background

- 1.1. A review of Fisheries Policy and Management was conducted in 2002-3 which resulted in the introduction of a new system of rights based management within the Falkland Islands fishing industry in 2005, known as an Individual Transferable Quota (ITQ) system. The Loligo and Toothfish fisheries entered into the ITQ system in 2006 and other finfish fisheries entered the new system in 2008. Illex does not currently operate under the ITQ system. ITQ are issued for up to 25 years under this system and are not due to expire until 2031. It is felt now is an appropriate time to review the ITQ system to assess whether it is achieving its objectives and working as anticipated for the FIG and Falkland Islands fishing industry.

2.0 Purpose of the Review

- To provide information to FIG to inform future decisions relating to ITQ and fisheries policy, including identifying areas for possible improvement
- Identify lessons learnt from the ITQ system to date to inform decisions on possible future introduction of ITQ to the Illex fishery
- To evaluate whether or not the ITQ system is meeting the expectations of the fishing industry and FIG, and identify areas for improvement with respect to impediments to the ITQ system meeting expectations
- Review the Economic Efficiency Tests (EET) and evaluate how appropriate and effective these are as mechanisms for monitoring the ITQ system, as well as evaluate how companies are performing in terms of the 'Effective Control' and 'Active Involvement' tests and the effectiveness of these tests in achieving their purpose

3.0 Scope of the Review

3.1. The review will seek to address the following objectives:

- a) Evaluate the ITQ system in terms of assessing whether::
- Economic performance of the sector has been enhanced because fishing businesses have increased security of access to the resource and flexibility in the way they can structure activities to take advantage of business opportunities
 - Diversification has occurred into value-added activities such as processing and marketing as they have been able to invest in assets other than vessels
 - Seafood companies have invested more in research and development
 - There has been increased co-operation between industry members on research and development, enforcement and environmental issues as companies no longer have to compete for licences
 - International competitiveness has increased
 - Profitability of the sector has increased which has increased Government income from personal and corporation tax
 - Environmental stewardship has increased because fishing companies hold long-term rights to a proportional share of a fishery – companies are taking a more long-term view rather than a short-term view

- The ITQ system is meeting expectations of the fisheries industry in relation to
Enhancing the financial performance of fishing companies and related businesses
- b) Evaluate whether the ITQ has:
 - Continued to contribute to Falkland Island economic growth and private sector development as measured, for example (but not exclusively), by the Island's national accounts
 - Increased opportunities as evidenced, for example, by the number of companies engaged in fisheries related businesses; fishing related employment; the ability of new entrants to participate in the fishery; and for existing participants to exit and participate in other sectors of the economy
 - Encouraged investment by companies into fishing related business, including vessels etc.
 - Raised any funding issues in relation to the ITQ system which may include how ITQ are purchased or transferred and the source of financing for such transactions.
 - Identifying with respect to the above:
 - Any potential barriers to significantly greater sector performance inherent in the design of the current ITQ system
 - Any potential barriers to sector entry and exit, including the availability of finance to potential new entrants
 - Any benefits realised by companies capitalising on trading of ITQ/leveraging on ITQ
- c) Evaluate, while controlling for factors external to the ITQ systems such as harvest levels and prices, the benefits and costs to FIG arising from the operation of the ITQ system with respect to:
 - Whether or not the ITQ system is supporting the Principles and Purpose of the Fisheries Ordinance 2005.
 - The cost of managing the ITQ system compared to the previous licensing regime
 - The amount of revenue (tax, license fees and user fees) flowing from the fisheries sector to FIG –directly and indirectly.
 - Evidence to support changes to key ITQ policy instruments such as measurements of efficient use, effective control and active involvement and aggregation limits
 - Whether or not the Economic Development Strategy (EDS) objectives for the fisheries sector remain relevant, appropriate and fit for purpose

4.0 Draft Timetable

4.1. Approximate timings for the review are set out below:

Feb 2014	Draft Terms of Reference presented to Fisheries Committee
Mar 2014	Draft Terms of Reference presented to ExCo
Apr - Sept 2014	Conduct review
Oct 2014	Independent peer review of the report, if one or other of the parties requests it

5.0 Methodology

- 5.1. FIFCA and FIG will agree final TOR for the study.
- 5.2. Although FIG will be responsible for the review, an agreed industry representative will be participating in a study team steering group.
- 5.3. The review report will be subject to independent peer review to ensure technical robustness and promote transparency in the review process, if one or other of the parties requests it.
- 5.4. The review will be undertaken using:
 - Desk research including analysis of existing data
 - Basic data collection from ITQ holders through a short data acquisition exercise
 - Interviews with members of the industry and all ITQ holders. These will be conducted by members of the FIG Policy Unit and Natural Resources directorate

6.0 Deliverables

- 6.1. The review will seek to address those objectives set out in section 3.0 above and will be presented in a final report to ExCo and FIFCA.

28 APPENDIX 2: Financial Data Analysis

ITQ Review: Financial data analysis

Policy Unit, Falkland Islands Government

March 2015

Abbreviations

EBIT	Earnings before interest and tax
FAO	Food and Agriculture Organization of the United Nations
FIG	Falkland Islands Government
ITQ	Individual transferable quota
MST	Medical services tax
R&D	Research and development
ROE	Return on equity
ROI	Return on investment

1 Introduction

This financial analysis is based purely on data provided and alone does not provide the contextual background or potential reasoning for trends or findings. It should be read in conjunction with the full report 'A Review of the Individual Transferable Quota System in the Falkland Islands'.

Companies involved in the fishing industry and the ITQ system were asked to submit key financial figures for the period 2003-2013. A form was sent to the companies requesting figures on general financial performance, turnover, expenditure, balance sheet, employees, and ownership structure. In addition to this the form included catch, cost, and ITQ valuation data on specific fisheries. Fish species included in the ITQ system were grouped into three: Toothfish, Loligo, and finfish. In total 44 companies returned a completed form. For the purpose of analysis the companies were divided into four groups according to their business functions (see table 1)⁶. The groups A to C were organised using strict criteria so that only companies with very similar business activities were included in each group. They do not necessarily include all companies that could describe themselves as belonging to one particular group. For example, some companies that are ITQ holders and parent companies of joint venture fishing companies are under group D and not B because they also have other business activities. The reason for this is because their other business activities could distort the statistical analysis of group B. Including a company in group D does not imply that fishing is not their main business activity, and many in group D are mainly fishing companies – it has no implications other than for the purpose of statistical analysis done for this report. Apart from these, other groupings have also been used throughout the analysis where appropriate.

Group A indicators are best used to reflect the overall profitability of the sector. This is because they carry out the bulk of the economic activity of fishing. The ITQ holder companies, group B, while contributing to the administrative and management functions of the industry are somewhat dependent on the profitability of group A.

Table 1. Groupings of companies used in analysis.

Group A – Vessel owners and operators with own crews	Group B – ITQ holder / parent companies
Beagle Fishing Company Ltd	Argos Group
Capricorn Ltd	Beauchene Fishing Co Ltd
Ferralemes Limited	Bold Ventures Fishing Company Ltd
Golden Touza Ltd - Golden Sea Ltd (combined)	Byron Fishing
Golden Touza Ltd (2003-2009)	Byron Holdings (2007-2010)
Igueldo Fisheries (F.I.) Ltd	International Fishing Ltd
Kalamar Limited	JK Marine Ltd
Petrel Fishing Company Ltd	Pioneer Seafoods Ltd
Petrel Trawling Ltd	RBC Limited
Polar Ltd	Seafish (Falklands) Ltd
Somio Fishing Limited	Seaview Ltd
South Atlantic Squid Ltd	Southern Cross Ltd
Southern Star Fisheries Ltd	

⁶ These groups were used solely for the purpose of increasing accuracy of the statistical analysis and have no other implications.

Group C – Vessel operator (own or subcontracted crews, no vessel ownership)	Group D – Other fishing companies
Australis Fishing and Trading Company Ltd	Argos Pereira ⁷
FIBOW	Consolidated Fisheries Ltd ⁸
RBC Chartering Limited	DYFI
Southern Bold Falkland Islands Limited	Falklands Fresh Ltd
Southern Ventures Falkland Islands Ltd	FIKO LTD
	Fortuna Ltd
	Jason Fishing Company Ltd
	Jupiter Fishing ⁹
	Marsur Ltd
	Nores Marine
	Orion Fishing ¹⁰
	Sullivan Shipping Services Limited

Note: After cleaning the data some data was ignored for specific analysis. Thus results referring to a particular group may not always include all companies.

2 Turnover

Figure 1 shows the total value of Toothfish, finfish, and Loligo catch of the companies who submitted the requested data. Loligo is clearly the most important of the ITQ controlled catches in terms of turnover. However, turnover from finfish and Toothfish has been increasing. This seems to be explained mostly by increase in prices although finfish catches over the period have generally improved (with the exception of 2013) (see figures 2 and 4). Toothfish prices in particular have experienced strong growth and Toothfish has much higher average unit value than Loligo and the finfish group. Figure 3 makes an attempt to compare Loligo and Toothfish prices to global market prices by using prices provided by Food and Agriculture Organisation of United Nations (FAO) as a reference. The FAO global average prices are export prices. The comparison is not straightforward as these prices may be subject to different transport and transactions fees. Nevertheless there seems to be quite close correspondence with the collected data. The use of transfer prices is not evident from this comparison. This would mean that companies are not artificially altering the prices to e.g. have their profits taxed in a country with a more lenient corporate tax rate. For the purpose of this analysis it would also mean that the revenues and profits of the companies are based on market conditions reflecting the true performance of the companies. Finfish was not broken down by species in the collection of data so this comparison has not been made for finfish.

⁷ Argos Pereira use sub-contracted crews and therefore fall outside the criteria for group A

⁸ CFL was not included in group A due to their involvement in other activities

⁹ Jupiter use sub-contracted crews and therefore fall outside the criteria for group A

¹⁰ Orion use sub-contracted crews and therefore fall outside the criteria for group A

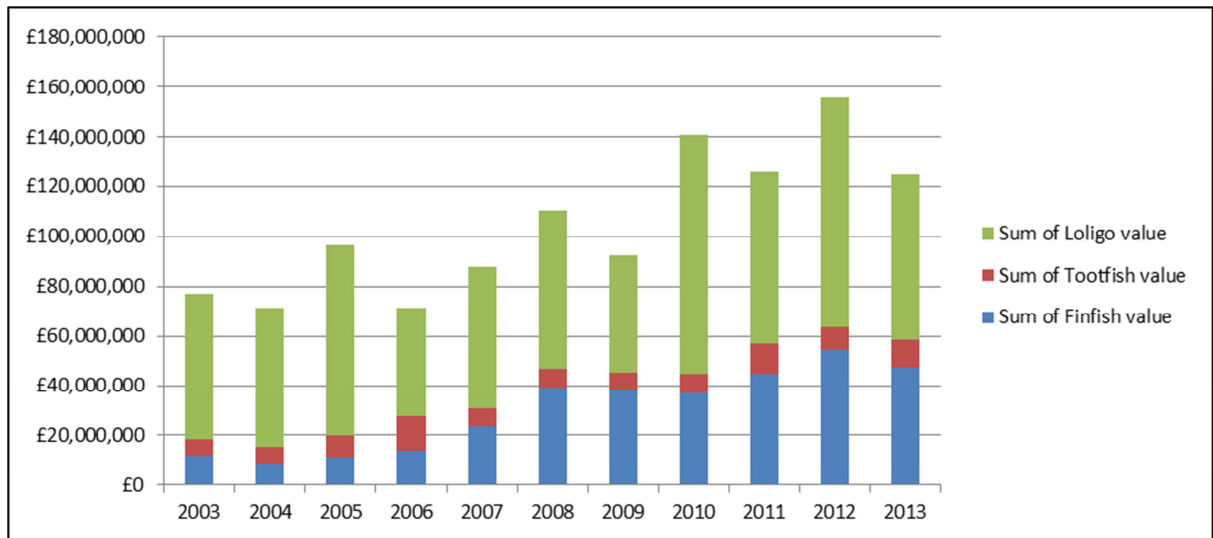


Figure 1. Total value of Toothfish, finfish, and Loligo catch of the studied companies.

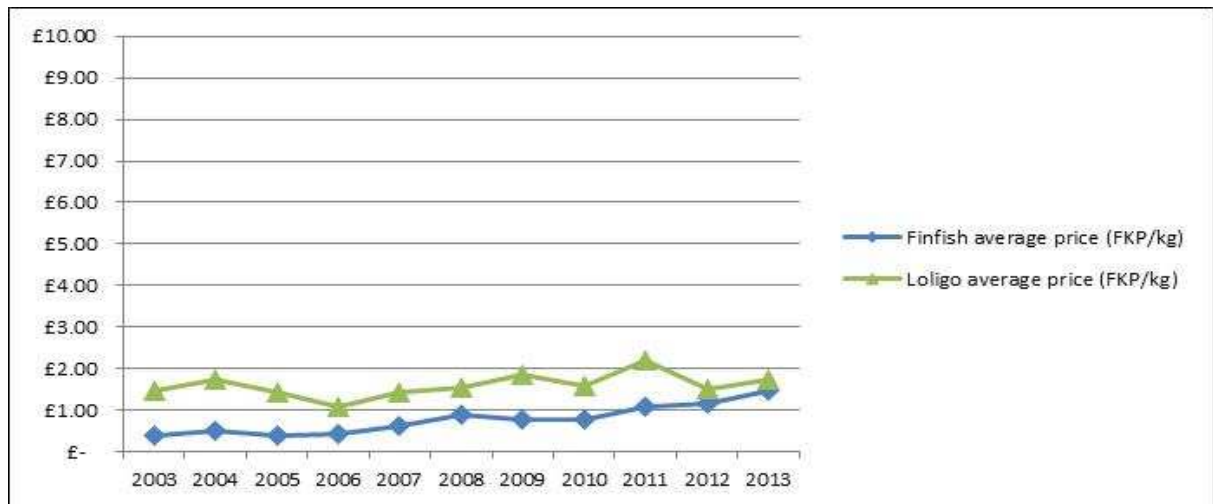


Figure 2. Average prices of finfish, Toothfish [TOOTHFISH REDACTED], and Loligo.

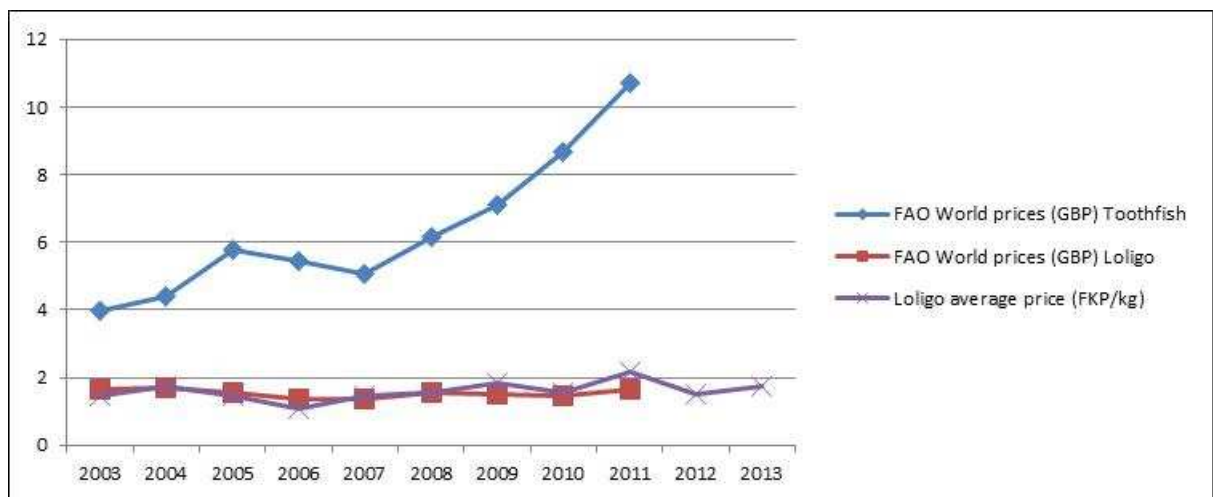


Figure 3. Comparison of average Toothfish [TOOTHFISH REDACTED] and Loligo prices compared to FAO world export prices. Source: FIG and FAO Fishstat database.

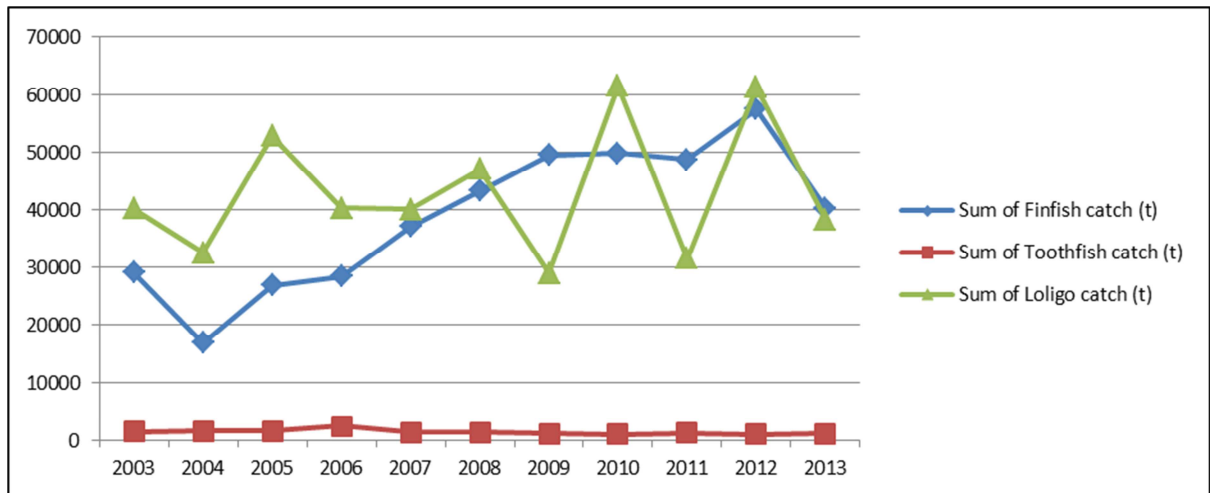


Figure 4. Loligo, finfish and Toothfish catch volumes in tonnes of the studied companies.

3 Profitability

Figure 5 shows the median profit margin of both group A and B companies. Group B companies' profits depend largely on group A and this is likely to be the case as group A tends to be the joint venture company where the fishing takes place and where profits directly associated with fishing are generated. The impact on group B companies depends on the arrangements they have in place, for example, management fees, dividends, or leaving funds in the joint venture. Group A profits will also depend on group B since group A companies do not have access to the catch entitlement generated by the ITQ without group B (who hold the ITQ) which would mean no profits for group A. During the best years group A companies have achieved profit margins of over 10 per cent. However, the companies were struggling for profitability during the period 2006-2009. The group B companies have clearly higher profitability than group A companies although where group B companies receive management fees, these tend to be received regardless of fishing results which may have an influence on profitability. The variance of profit margin has been decreasing for both groups suggesting a convergence in profitability.

Average return on investment (ROI, figure 6) trend is fairly similar to the profit margin curve. Over the period 2003-2013 average return on investment for the vessel owner and operating companies was fairly low at 7.0 per cent with average profit margin at 5.0 per cent. The figures were considerably higher at 17.6 per cent and 31.2 per cent respectively for the group B companies. However, average return on equity (ROE, figure 7) is slightly different and shows high variance particularly for group A companies. Quite a lot of this variance is due to individual companies. It is also quite common to have negative equities making the use of this indicator difficult (these have been excluded from the figure). The average ROE over 2003-2013 was 18.1 per cent for group A and 26.7 per cent for group B.

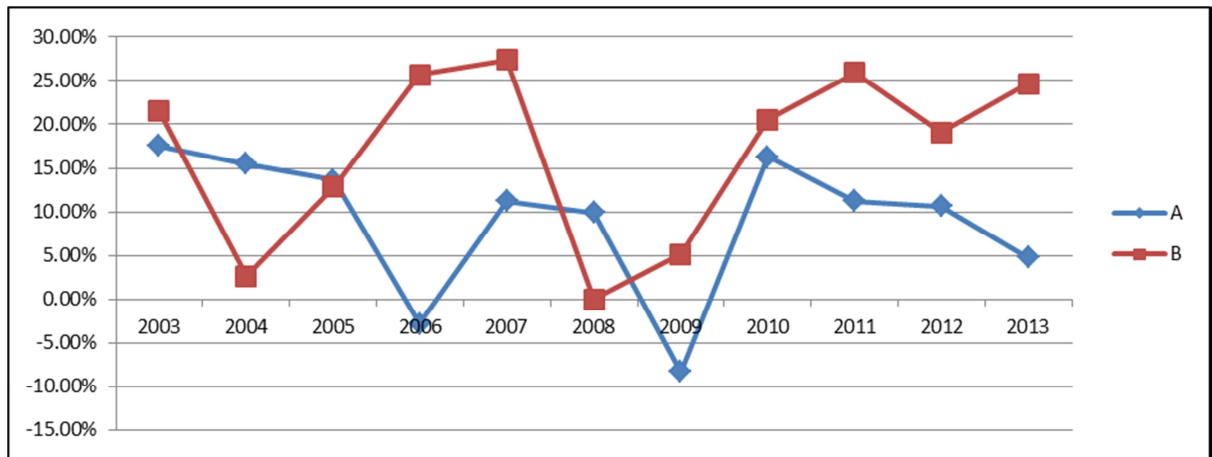


Figure 5. Median profit margin of group A and B companies.

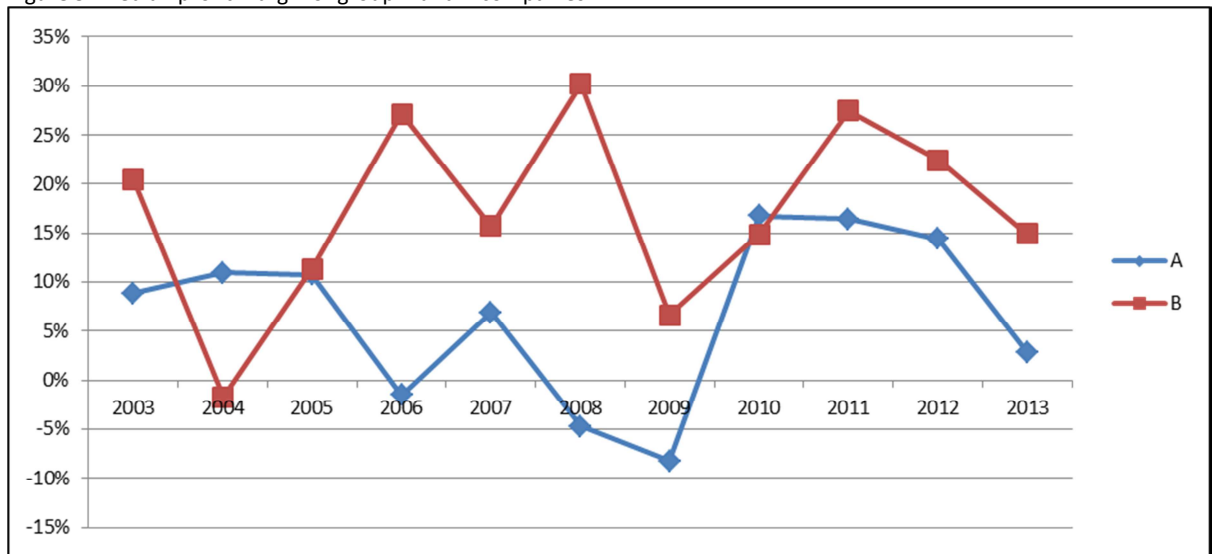


Figure 6. Average return on investment (ROI) of group A and B companies.

Table 2. Average profit margin and return on investment of groups A and B.

	Group A		Group B	
	Average of Return on investment	Average of Profit margin	Average of Return on investment	Average of Profit margin
2003	8.9%	10.5%	20.4%	37.1%
2004	10.9%	10.6%	-1.7%	-0.7%
2005	10.8%	14.7%	11.4%	31.6%
2006	-1.5%	-5.9%	27.1%	37.0%
2007	6.9%	6.3%	15.7%	17.9%
2008	-4.7%	-22.1%	30.2%	113.3%
2009	-8.2%	-7.7%	6.6%	1.6%
2010	16.7%	15.3%	14.9%	23.2%
2011	16.4%	10.9%	27.5%	34.8%
2012	14.4%	10.9%	22.4%	30.0%
2013	2.9%	4.0%	14.9%	27.7%
Grand Total	7.0%	5.0%	17.6%	31.2%

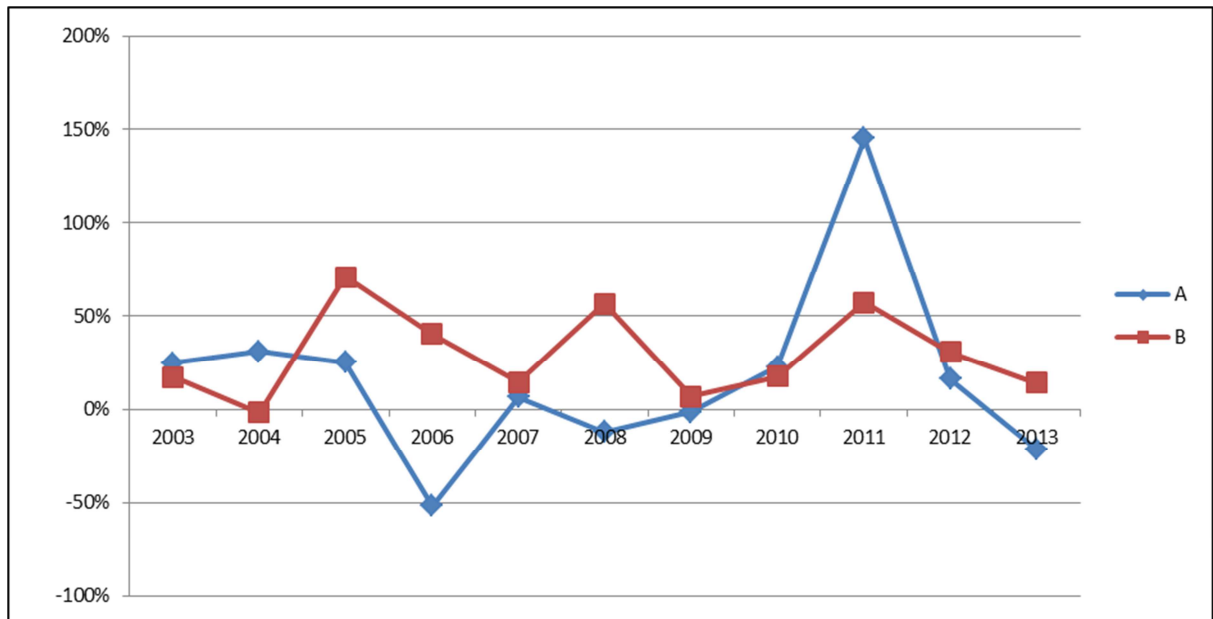


Figure 7. Average return on equity (ROE) of group A and B companies.

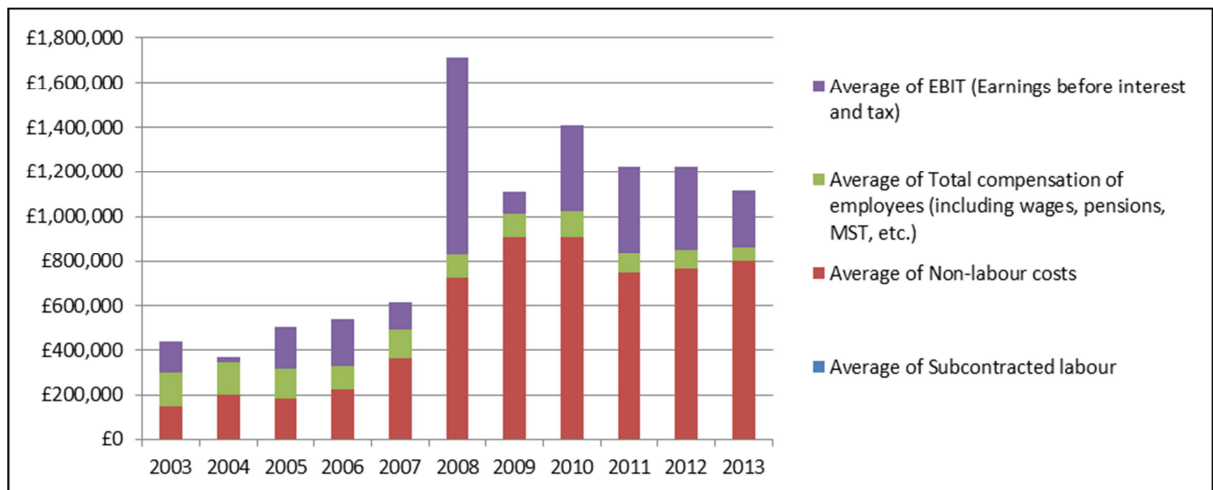


Figure 8. Average EBIT and costs for group B companies.

Turnover of group B companies has increased considerably since 2003. However, this seems to have been largely offset by an increase in non-labour costs (see figure 8). Nevertheless, it reflects a change in the role of these companies after the introduction of the ITQ system and appears to be related to a change in the way companies are set up. The joint venture companies now often pay management fees to the group B companies, who then pay licence/quota access fees to the government. Licence/quota access fees are now the single biggest cost item for group B companies. In the past the financial arrangements between the companies for paying the fees may have been different.

The three species groups used have very different profitability (see figure 9). Toothfish gross margins have increased to a very good level, mostly due to the increase in Toothfish market price. Loligo gross margins have been decreasing and have been at a poor level or even negative over the past years. This is because Loligo cost of sales has increased quicker than revenues. When measured by gross margin finfish profitability is poor, even though there has been improvement since the early 2000s. However, finfish may be caught by the same

vessels as Loligo, and thus although not very profitable¹¹, allow these vessels to cover part of their costs. There is reason to be concerned over profitability of Loligo and finfish fisheries and monitor trends in costs and profitability. Many cost items such as bunker fuel, cost of vessels, labour, and transport costs are largely outside the fishing companies' control. Falling oil prices during the second half of 2014 may have improved profitability. Figure 10 shows the trends in unit cost of sales for the three fisheries. Finfish costs have increased relatively most and Toothfish the least. In the period 2003-2013 Toothfish and finfish average prices have increased quicker than the cost of sales per tonne, whereas for Loligo the opposite has happened.

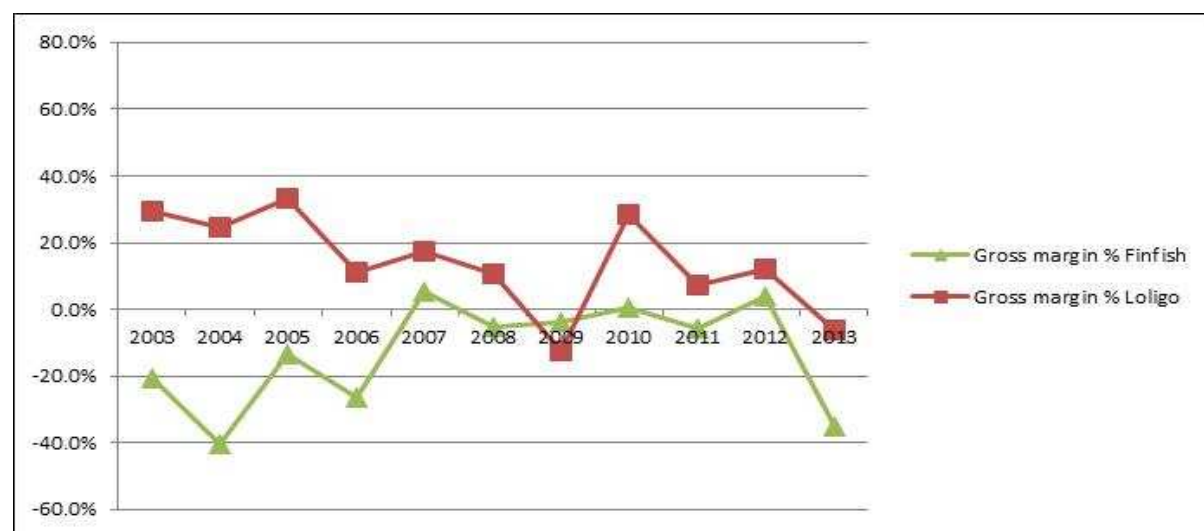


Figure 9. Gross margins by species calculated from total catch value and total cost of sales [TOOTHFISH REDACTED]

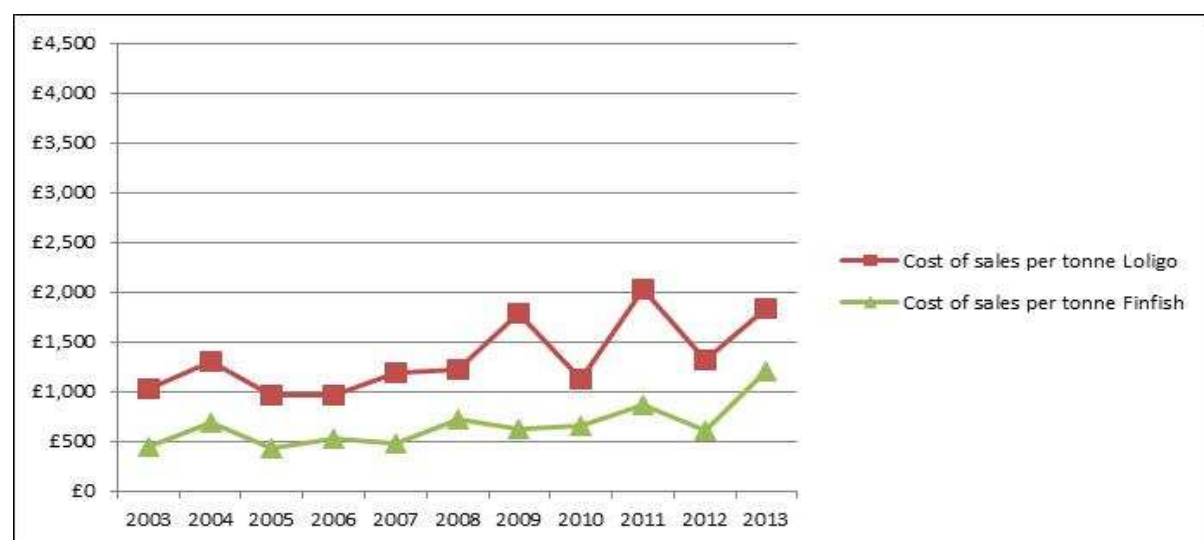


Figure 10. Cost of sales per tonne caught by species group [TOOTHFISH REDACTED].

¹¹ In such cases gross margins are based on the allocation of cost of sales between the two species by the companies, which may not give an accurate picture when the species are studied individually.

4 Assets and solvency

Solvency of group B companies has been clearly better than group A companies on average as measured by assets to equity ratio (see figure 11). Group A companies historically appear to be quite indebted but have shown clear improvement since 2007 and the turning point seems to coincide with a period when these companies were least profitable. A potential reason could be that parent companies injected capital and paid less dividends during the least profitable years. Currently companies have in general very strong solvency.

Figure 12 shows the trends in different asset classes for companies owning vessels. Increased equity explains why return on equity figures have been developing less favourably than return on investment figures. Companies that have very little debt generally benefit less from leverage effects of debt on return to investors. It may also reflect the maturity of a business sector with limited growth prospects and investment opportunities.

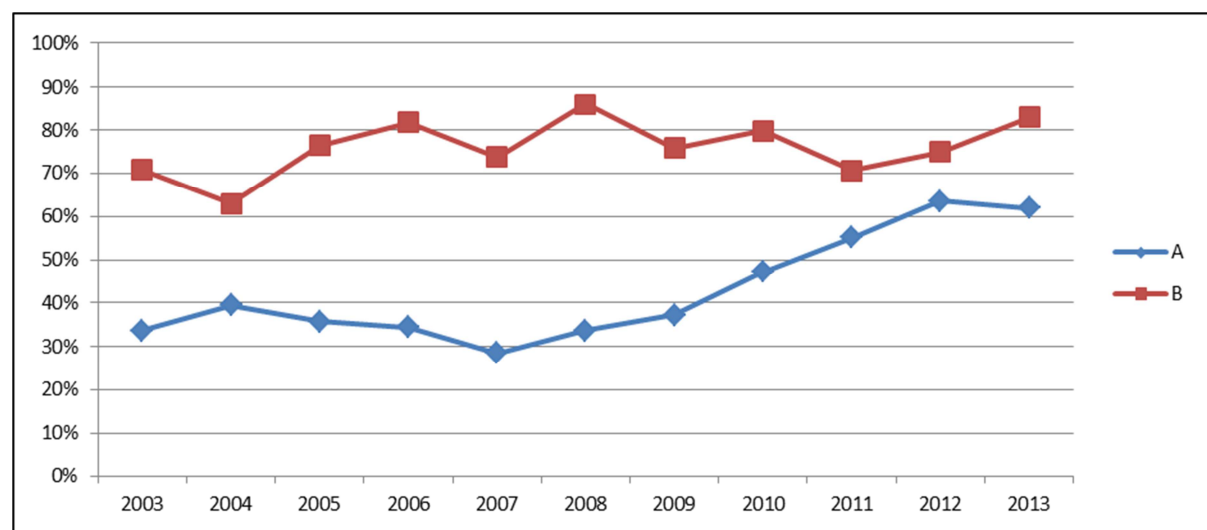


Figure 11. Average equity to assets ratio of group A and B companies.

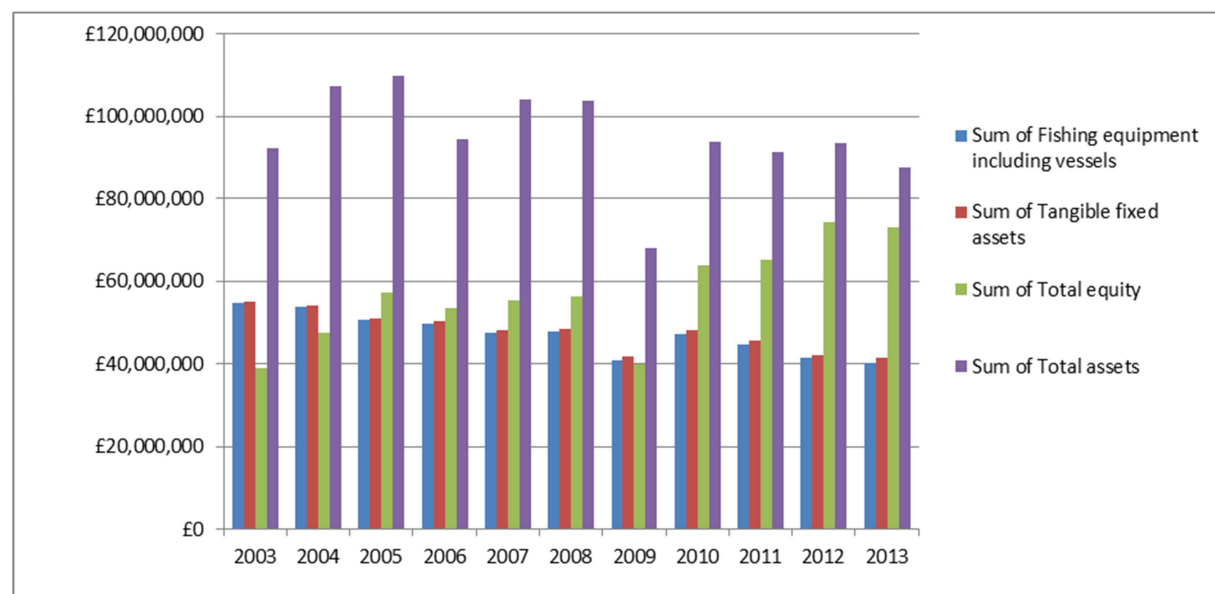


Figure 12. Total assets of vessel owning companies.

Companies with strong balance sheets would be in good position to expand their businesses but there appears to be no evidence of increased investment. Figure 12 shows that regardless of increased equity the value of fishing equipment and vessels has been decreasing. The data shows no signs of increased investment into the fishing industry, unless in intangible assets abroad. It also does not necessarily show fishing companies' investment outside fishing operations. Figure 13 shows that additions to fishing equipment have been less than depreciation charged on them over several years. However, in an industry with a limited number of companies, this depends on the timing of acquisitions which appear to be focussed on some years (most notably 2003, 2004, and 2014). It appears the ageing fishing fleet is, at least not yet, being replaced in big numbers. With a few exceptions, there appears to be no investment into research and development by companies. The quota system sets limits to growth solely through the supply of fish for companies, but this does not exclude investment into other fishing related assets such as new vessels, more efficient technologies or processing plants for example, which may create growth in the industry.

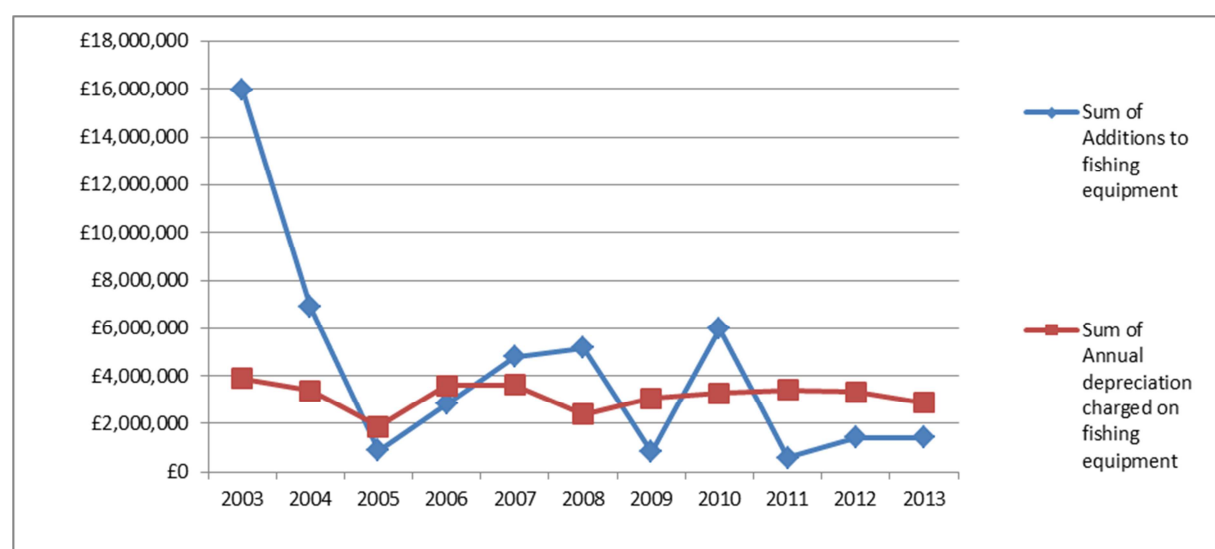


Figure 13. Depreciation charged and total additions to fishing equipment and vessels of vessel owning companies.

It is expected that return on equity will decrease over the industry unless fishing companies manage to expand to new business areas that provide higher return than the current activities. Some of the fishing companies have been involved in real estate and it is possible for this to grow further putting upward pressure on real estate prices.

Only four of the companies reported ITQ valuation in their assets. The other companies didn't set any value for the quotas on their balance sheets, mainly because they didn't pay to receive the quotas. Nevertheless ITQ clearly has financial value as some trade in the quotas has taken place. The business model of most ITQ holding companies is based on exploiting fishing rights. The intangible assets of these companies are thus likely to be undervalued¹². For most companies changes in the value of the quotas does also not affect company profit.

The financial data suggests that in many cases companies holding ITQ receive management fees from companies operating fishing vessels which is equivalent to quota access fees plus a percentage. The ITQ holders make payment to Government for the quota access fee,

¹² Undervalued from a corporate finance or economic perspective, not necessarily from accounting perspective.

retaining a management fee. Based purely on the figures, these transactions could be seen as a form of leasing licences to a third party company – from the data alone it is not clear how much control the companies holding the ITQ exercise over the fishing industry or the extent to which they are actively involved. However, it is evident from the qualitative research that ITQ holders are very much actively involved in one or more of taking, processing or selling fish and to varying levels have control (see main report, sections 7 and 8). This could suggest it is not merely ITQ holders acting as a passive company through which outside fishing companies are accessing Falkland Island waters, but ITQ holders are capitalising and generating cash flow for reinvestment into the business.

5 Value added

A simple gross value added estimation was done for the companies summing up Earnings before Interest and Tax (EBIT), compensation of employees, additions of fishing equipment and vessel assets, and research and development expenditure. These figures were then deflated using a fish output based deflator and the assumption of constant intermediate consumption to output ratio. The result is shown in figure 14 and shows no clear growing or declining trend, suggesting the economic importance of the fishing industry, while showing considerable variation between years, has remained stable in the longer-term. Group A companies account for most of the value added. When measured with gross value added introduction of ITQ appears to have had no significant economic impact. Nevertheless there may be other economic impacts not captured by the gross value added measure used.

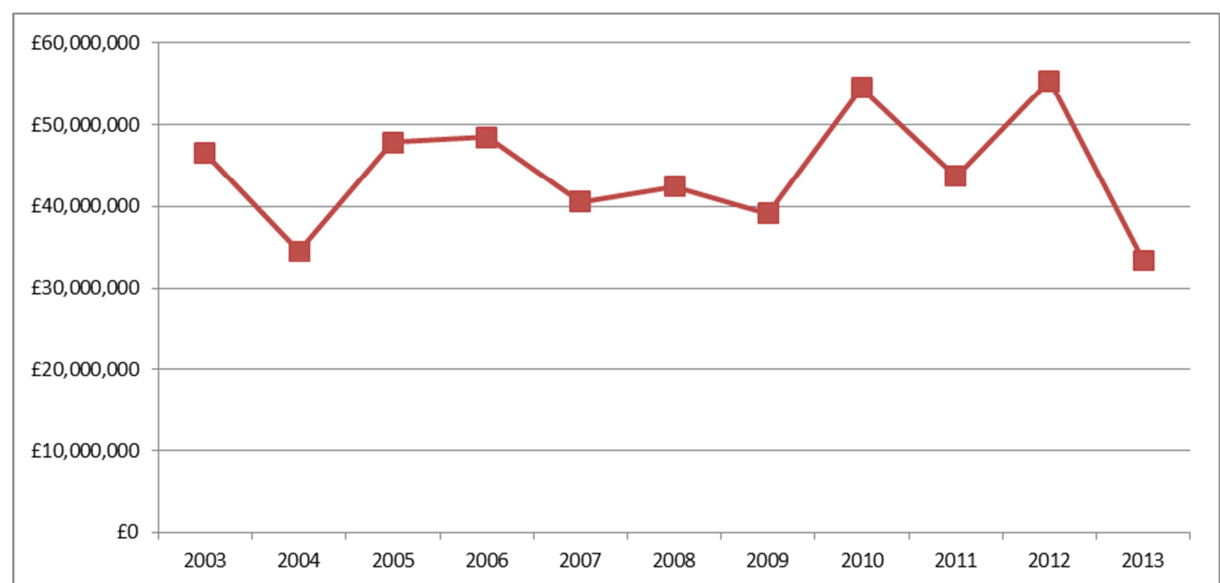


Figure 14. Gross value added estimation of selected companies at 2012 constant prices.

6 Competitiveness and labour productivity

According to data provided by companies, the quantity of labour has been quite stable over the years. Therefore labour productivity (figure 15) also follows the gross value added trend in figure 14. From the data it appears that labour productivity does not have a clear increasing or decreasing trend. Figure 16 shows a comparison of labour productivity with average compensation to employees at current prices. Both are clearly higher for group B companies reflecting the role of their directors. For group A, 2009 was the only year when employees were compensated above their productivity.

As discussed previously, growing costs and shrinking gross margins have been problematic for the Loligo fishery. While average compensation of employees has increased, this seems to be slower than the increase in general cost of sales. The non-labour costs may be influenced by bunker fuel price. Overall, since unit non-labour costs have been increasing and there is lack of clear growth in labour productivity, it may be that competitiveness of the industry has not improved. However, this may be partially due to external factors such as oil prices.

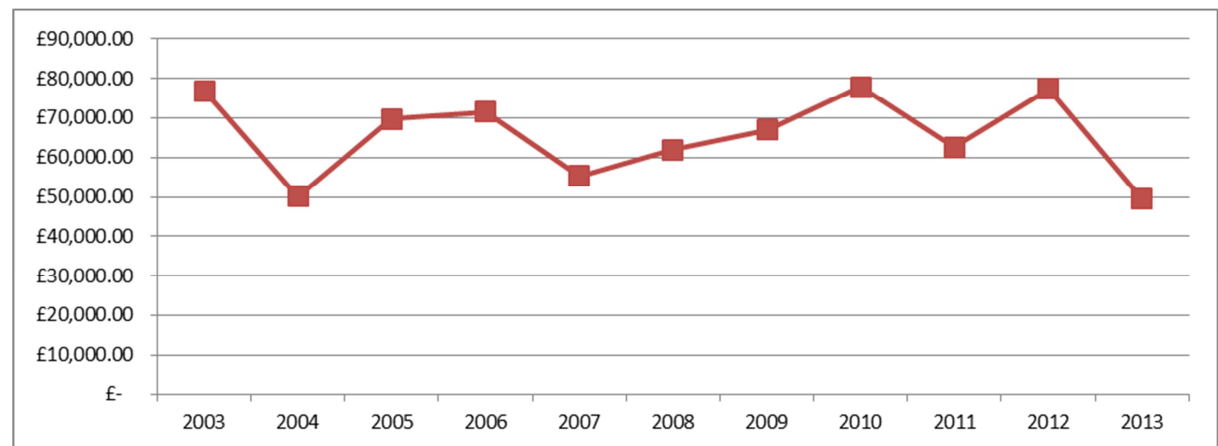


Figure 15. Labour productivity estimate at 2012 constant prices

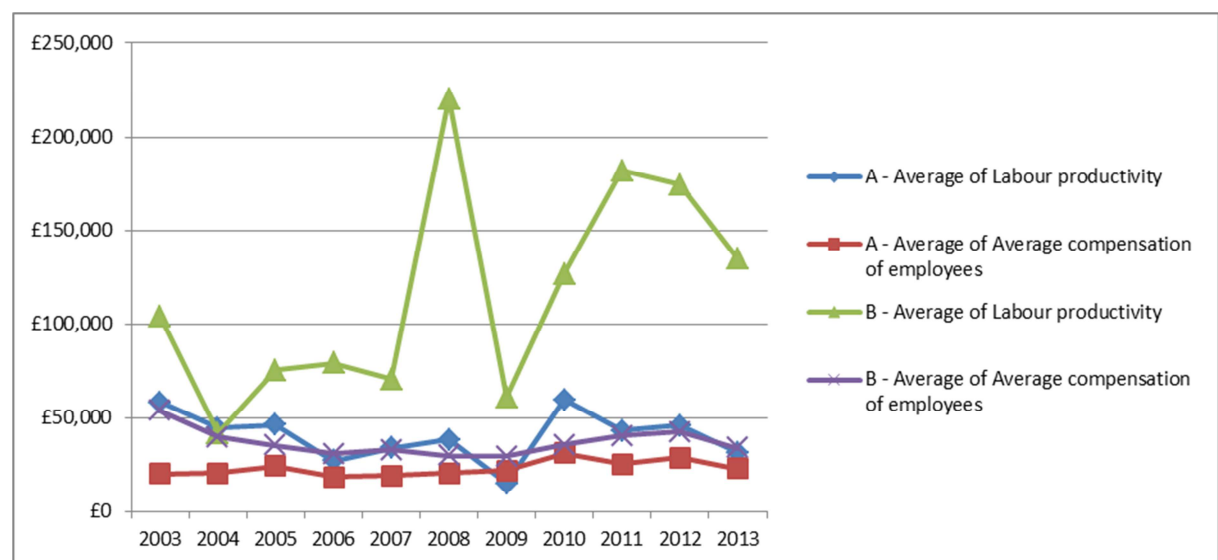


Figure 16. Average levels of compensation to employees (including MST and pension payments) and labour productivity at current prices.

Formulas used in calculating the key indicators

The key indicators were calculated from the survey data. Thus the some equations needed to be simplified from their usual forms to match the data available.

$$\text{Equity to assets ratio} = \frac{\text{total assets}}{\text{total equity}}$$

$$\text{Gross margin} = \text{turnover} - \text{cost of sales}$$

$$\text{Profit margin} = \frac{\text{EBIT}}{\text{turnover}}$$

$$\text{Return on equity} = \frac{\text{profit on ordinary activities}}{\text{average equity over the period}}$$

$$\text{Return on investment} = \frac{\text{EBIT}}{\text{total assets}}$$