QUARTERLY ECONOMIC NEWSLETTER

EVE ONLINE
3rd Quarter 2010

CCP

QUARTERLY ECONOMIC NEWSLETTER

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PUBLICATION INFORMATION

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DISCLAIMER

EDITORIAL

EVE is a living, thriving community of very dedicated people, from the player perspective as well as from the developer side. The dedication of the community is phenomenal, and nowhere is this more obvious than through the hard work of the members of the Council of Stellar Management (CSM). The CSM is a player-elected council, elected by players for players in an annual election. The CSM visits CCP two or three times per year to review EVE, both in terms of what needs to be fixed as well as in terms of the game's future vision.

Seeing this process evolve over time has been really interesting. Sometimes the players and developers disagree on what is the best course of action. This was evident during the Q2 2010 session, where members of the CSM stated their dissatisfaction with the strategy for EVE and requested that more effort would be put into fixing what needed to be fixed. CCP took a long hard look at the CSM's comments and concluded that indeed they were right. Based on feedback and further communication with its members, a new approach was proposed and introduced to the CSM in a meeting recently held in Iceland. In addition, a review of fixes that had been implemented since Q2 showed the CSM that CCP took their suggestions and criticism very seriously. Like other aspects of EVE, the CSM is continuing to evolve and emerge as a fundamental part of the whole experience.

Winter is coming. For some, this means snow and long dark cold days. For others, this is the beginning of a new summer season – all depending on where in the world one is located. And then there are those that wait for winter for a completely different reason – EVE Online's winter expansion. This year's winter expansion has been named after its biggest feature: Incursion. This feature, as is implied by its name, introduces a new danger to New Eden, one that can only be combated through pilot cooperation and smart tactics. It is likely that a lot of vessels will be lost due to this new menace threatening EVE, which in turn requires those who manufacture ships, ammunition and other modules to step up their production for Q4 of 2010. We therefore expect to see economic activity increase substantially throughout the next quarter.

Other subtle but very important changes are also coming up in Incursion. One small feature will have a big impact on the market for factional ships. This small change is the addition of factional ships to the market window, allowing all factional ships to be sold directly on the market rather than through the less transparent contract system. This is an exciting change, since information about the total number of factional ships in-game has been very limited and price reports inaccurate, to say the least. The first few weeks will be a prime time for any market speculator to make some serious ISK while the market is stabilizing. Economic theory would predict that with better transparency and better market access prices will go down. However, since consumer preferences might have been hindered by the non-transparency of the contract system, there might be a lot of piled-up demand for factional ships, so until the market has reached something of an equilibrium, one can expect relatively large price fluctuations. Prime conditions indeed for some interesting market PvP.

Winter is coming – but in New Eden, winter is the time for more fun with some great pilots at your side (or against you, for that matter). And these pilots will become more visible. Incursion will feature a new character creator, serving as one of the preludes to full blown avatars in Incarna – the time when pod pilots can walk amongst pod pilots. Incarna is coming.

In EVE, winter is welcomed as it brings more stuff into New Eden – and more is good.

Calling all pod pilots: take care, fly safe and see you in space.

POPULATION

At the end of Q3 2010, 46.5% of characters were in NPC corporations and 53.5% in player-owned corporations. There were no significant changes from last quarter in terms of race ratios, except for a small increase in Minmatar characters..

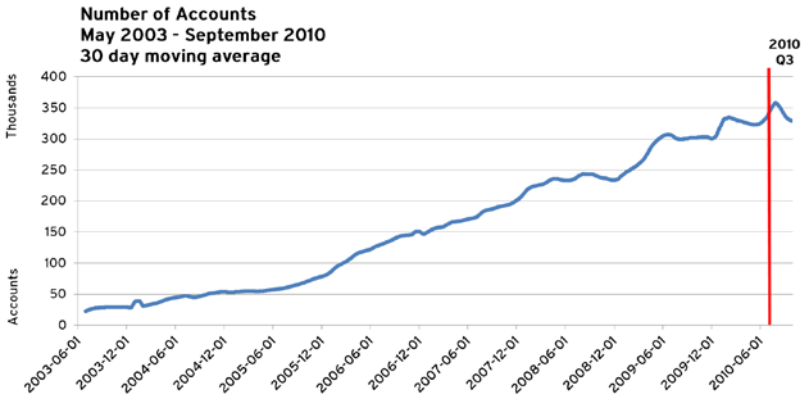


Figure 1: Total number of subscriber accounts from May 2003 through September 2010. The expansion spike is over and we are seeing the 30-day average fluctuate at 330,000 subscribers. With the usual expansion cycle and increased winter activity, we can expect another spike before the end of the year.

The special report in this QEN focuses on player vs. player fighting (PvP), so looking more into some statistics on PvP and PvE behavior is a good prelude to that chapter. The data used for this analysis contains all kills throughout Q3 2010, with total losses of approx. 800,000 ships of all shapes and forms. It is generally believed that the race of a character is not critical in determining how it is used. The skill system allows for training of various different race-specific skills, so the initial choice of race should not matter. If this holds true, then the ratio of pilots participating in PvP (willingly or not) should be the same as the ratio of characters in-game. If we look at losses by race of the character flying the ship when it was lost on the one hand and the character that strikes the final blow on the other, we see that PvPing seems to be skewed toward the Caldari and Minmatar races in terms of characters (though not ship types). Out of all kills during Q3, Amarr characters represented 16% of the killers and 16.5% of the victims. That is significantly lower than Amarr characters' total racial population ratio of 18.4% in New Eden. The situation for Gallente pilots is similar, with 22.8% of final kills coming from Gallente pilots while Gallente pilots account for 25.3% of all characters in EVE. Caldari and Minmatar pilots have a higher proportion of the total final kills

and a lower proportion of the total losses than Gallente or Amarr. From this we can deduce that the character race does indeed seem to have an impact on the success of – or interest in – PvP. Table 1 shows the percentage of ship losses and ship kills by race.

	Share of ...		
	...lost ships	...final kills	... characters
Amarr	16.4%	15.9%	18.4%
Caldari	36.5%	38.3%	35.8%
Gallente	25.7%	22.8%	20.5%
Minmatar	21.5%	22.9%	20.5%

Table 1: Share of character ratios by lost ships, final kills and overall race ratio in EVE.

Of these 800,000 kills, just over half, or 51%, happened in null security space, 29% in low security space, 16% in high security space and 4% in wormhole space.

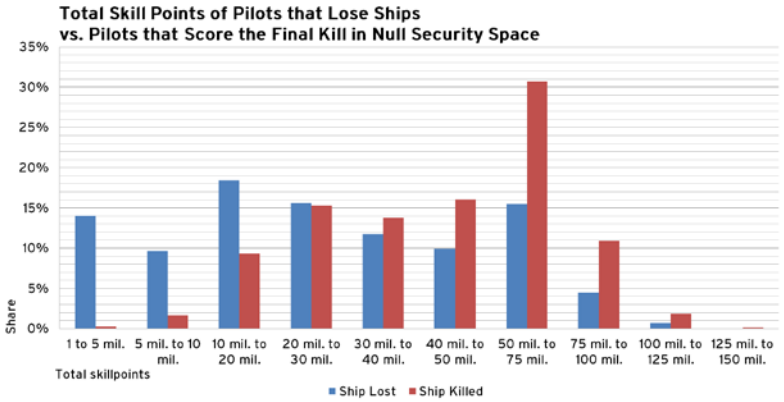


Figure 2: Total skill points for characters that lose a ship vs. characters that score the final blow.

Figure 2 shows us the total skill points in ten categories for pilots that killed a ship or lost one in null security space. What is noticeable right away is the fact that characters with a lower total number of skill points account for a higher portion of lost ships. What is also noticeable is that a majority of all final kills in null security space is made by players with more than 50 million skill points. This is in stark contrast to low and high security space, where less than 40% of the final kills are scored with characters that have 50 million skill points or more. As an example, only 35% of all kills in low security space are made by players with more than 50 million skill points and only 35% of all kills in high security space are made by players in this same category. The distribution shows clearly how characters progress within EVE, where pilots move from high security space to low security space and then finally into null security space as their skills and experience grow. Assuming around 20 million skill points per year, these numbers would suggest that it would take the average player around 2 years in order to become competitive in null security space, but that once they have reached that level they are fully competitive with other players.

SHIP TYPES IN USE

As in previous editions of the QEN, this data comes from a single snapshot of the EVE universe at the end of the quarter.

This quarter saw the number of characters flying Industrial ships rise from 49,585 to 50,676. Whilst not a huge increase, this was nonetheless enough to push the Bestower and Badger Mark II up in the rankings. The Raven has continued to see a general decline, falling yet further from its former position as the most commonly flown ship in EVE prior to 2008. Overall, the number of characters on active accounts fell this quarter from 716,990 to 696,256.

	Ship Type	No. of Ships	% of Total	Change
1	Hulk	17,195	2.47%	1
2	Drake	16,639	2.39%	1
3	Kestrel	11,102	1.59%	1
4	Rifter	10,358	1.49%	1
5	Bestower	8,204	1.18%	2
6	Retriever	7,940	1.14%	-
7	Badger Mark II	7,857	1.13%	1
8	Hurricane	7,565	1.09%	2
9	Catalyst	7,028	1.01%	2
10	Raven	6,910	0.99%	-1
	Rookie ships, shuttles and capsules	282,416		
	Other	313,042		
	Total	**696,256**		

Table 2: The ten most flown ships at the end of Q3 2010. Rookie ships, shuttles and capsules were grouped together and listed separately. The Primae, a promotional ship released just prior to the end of Q2, has fallen from 1st place to 28th.

This quarter the Hulk regained its position as the most flown ship type in the game. The end of Q2 saw it replaced by the Primae in this category, shortly after the Primae was given to every player with an active subscription. When the last snapshot was taken, an upcoming player-run event named the 'Hulkageddon' was about to start. This was an event where the stated goal was destroying the most mining ships possible. It can therefore be posited as an additional reason for lower numbers at the time.

Compared with Q3 2009, the Hulk has not seen a significant increase in popularity in terms of the proportion of Hulks being flown compared to other ships, with the Hulk constituting 2.47% of all ships this quarter compared to 2.49% a year ago. The Drake, however, has seen a substantial increase – from 2.09% a year ago to 2.39% this year. This can be largely explained by their increased popularity in null security PVP conflicts, in addition to their popularity as PVE vessels. The popularity of the ship can be attributed to the relative ease of passively tanking them and the low skill requirements needed to fly them competitively.

For the fourth quarter in a row, electronic attack ships remain the least popular ship group in terms of numbers of characters flying them, with only 268 being flown. Titans were the second least flown with 417 (growing from 364), and black ops, up from being the least popular ship group at the end of Q3 2009, are in third position with 425. The overall least flown ship type which is actively available (e.g. not a tournament reward or other limited-availability ship) was the Scythe Fleet Issue, with only 5 being piloted at the time of the snapshot.

	Ship Group	Q2, 2010	Q3, 2010	Growth
1	Supercarrier	963	1,349	40.08%
2	Dreadnought	593	755	27.32%
3	Strategic Cruiser	7,355	9,168	24.65%
4	Carrier	4,976	5,899	18.55%
5	Jump Freighter	974	1,139	16.94%
6	Black Ops	364	425	16.76%
7	Titan	364	417	14.56%
8	Logistics	1,783	2,009	12.68%
9	Freighter	5,395	5,946	10.21%
10	Industrial Command Ship	6,302	6,907	9.60%

Table 3: The top 10 ship groups in terms of percentage growth between Q2 and Q3. Figures are based on snapshots of active ships at the time. Supercarriers have seen substantial quarter-on-quarter growth for the third quarter in a row, along with strategic cruisers, which have been growing rapidly since their introduction in the Apocrypha expansion of March 2009. Logistics cruisers have also seen rising use since Apocrypha. Note that the numbers for supercarriers and titans are affected by their inability to dock, which means they are piloted at all times, while other ship types will often be inactive."

Supercarriers have continued to see rapid growth since balancing changes during the first quarter, with a further 386 being flown this quarter compared to last. This means that the number of characters piloting supercarriers has more than doubled since Q1 2010, when there were only 650 being flown. Strategic cruisers have again continued with the significant quarter-on-quarter growth that we have seen every quarter since their introduction, with the number flown increasing by a further 24.65%.

POPULATION DISTRIBUTION

The data in this section comes from a snapshot of the EVE universe at the end of Q3 2010, and shows the locations of characters on active accounts at that time. For purposes of this section, we have divided EVE into eleven sectors comprising the four empire factions (with Derelik and Khanid included as part of the Amarr Empire), wormhole space (unknown space), and null security space, which is divided into a further six sectors as follows:

North	West	South	South East	East	North East
Geminate	Deklein	Delve	Providence	Great Wildlands	Cobalt Edge
Vale of the Silent	Fade	Querious	Catch	Curse	Outer Passage
Tribute	Pure Blind	Period Basis	Immensea	Scalding Pass	Oasa
Venal	Cloud Ring	Stain	Tenerifis	Wicked Creek	Perrigen Falls
Branch	Outer Ring	Esoteria	Impass	Insmother	Malpais
Tenal	Syndicate	Paragon Soul	Feythabolis	Detorid	The Kalevala Expanse
	Fountain			Cache	Etherium Reach
					The Spire

Table 4: **The six sectors of null security space.**

This quarter saw a further shift toward null security and wormhole space, with more characters choosing to move to lawless areas. Wormhole space has seen the most dramatic increase, with a 6.57% growth in total population. At the end of the quarter, 2.42% of characters were located within wormhole space. This is a fairly dramatic increase, since at the end of Q1 only 1.76% of characters resided there.

Type	Population Q2 2010	Population Q3 2010	Q2 % of Total	Q3 % of Total	Change
Empire	623,917	601,848	87.08%	86.51%	-0.57%
Null Security	76,739	76,999	10.71%	11.07%	0.36%
Wormhole	15,808	16,846	2.21%	2.42%	0.21%

Table 5: The distribution of population between empire space, null security space and wormhole space this quarter compared to Q2.

Empire space lost 0.57% of the total population to null security and wormhole space, down from a 1.03% loss of population last quarter, whilst null security space continues to show healthy growth – now up to 11.07% of the player base, from 10.13% six months ago.

Sector	Systems	Population Q1 2010	Population Q2 2010	Change
Caldari	326	233,733	229,278	-1.91%
Amarr	913	153,958	147,762	-4.02%
Gallente	388	136,246	129,046	-5.28%
Minmatar	280	99,980	95,762	-4.22%
West	500	16,238	19,461	19.85%
North	513	15,962	16,093	0.82%
South East	540	12,671	12,132	-4.25%
South	488	9,499	12,058	26.94%
East	564	15,526	10,468	-32.58%
North East	689	6,843	6,787	-0.82%
Unknown	2,499	15,808	16,846	6.57%

Table 6: **Each of the sectors and their change in population in Q3 2010 as compared to Q2**

The continued growth of Jita has helped offset the reduction that the other empire sectors have seen, with Caldari space seeing only a -1.91% reduction in total population compared to an average of -4.51% of the other three empires. In null security space, dramatic population shifts have occurred in the south, southeast and east, a development which can be attributed to large scale alliance warfare where several alliances have lost all of their territory. The west sector has seen remarkable growth this quarter after the arrival and rapid growth of two new alliances in the Deklein region.

System	Characters Q2 2010	Characters Q3 2010	% Change	Rank Change
Jita	31,199	33,501	7.38%	-
Amarr	7,894	7,856	-0.48%	1
Rens	8,372	7,856	-6.16%	-1
Dodixie	6,189	5,865	-5.24%	-
Motsu	3,550	3,482	-1.92%	1
Arnon	3,732	3,417	-8.44%	-1
Hek	3,437	3,397	-1.16%	1
Oursulaert	3,496	2,987	-14.56%	-1
Akiainavas	2,384	2,576	8.05%	1
Couster	2,318	2,316	-0.09%	2
Total in Top 10:	**72,743**	**73,253**	**0.70%**	
Total in All:	**487,933**	**467,190**	**-4.25%**	
% in Top 10 Systems:	**14.91%**	**15.68%**	**5.17%**	

Table 7: The 10 highest-population systems as of the end of Q3 2010 compared to Q2 2010. These numbers exclude characters with either a rookie ship or capsule as their active ship.

This quarter sees Jita continuing to grow, with over 33,500 characters located there at the end of Q3. At the end of Q1, there were 28,996 characters there – a 15.54% increase in six months. 7.17% of all characters in EVE who were not in a capsule or rookie ship were located within Jita at the time of the snapshot.

Amarr's proportion of empire space-located characters has grown this quarter, even as the sector's total population has contracted. Amarr's quarterly drop was only -0.48%, compared to -4.02% for its sector. This has been enough to push Amarr into second place ahead of Rens, the long-time holder of that position.

Overall, this quarter has continued the trend seen last quarter with more players both moving out into lawless space and into the more densely populated areas of high security space. This can be attributed to the greater industrial possibilities available in null security space, as well as growing demand for Tech III materials which encourages residents of empire space to relocate.

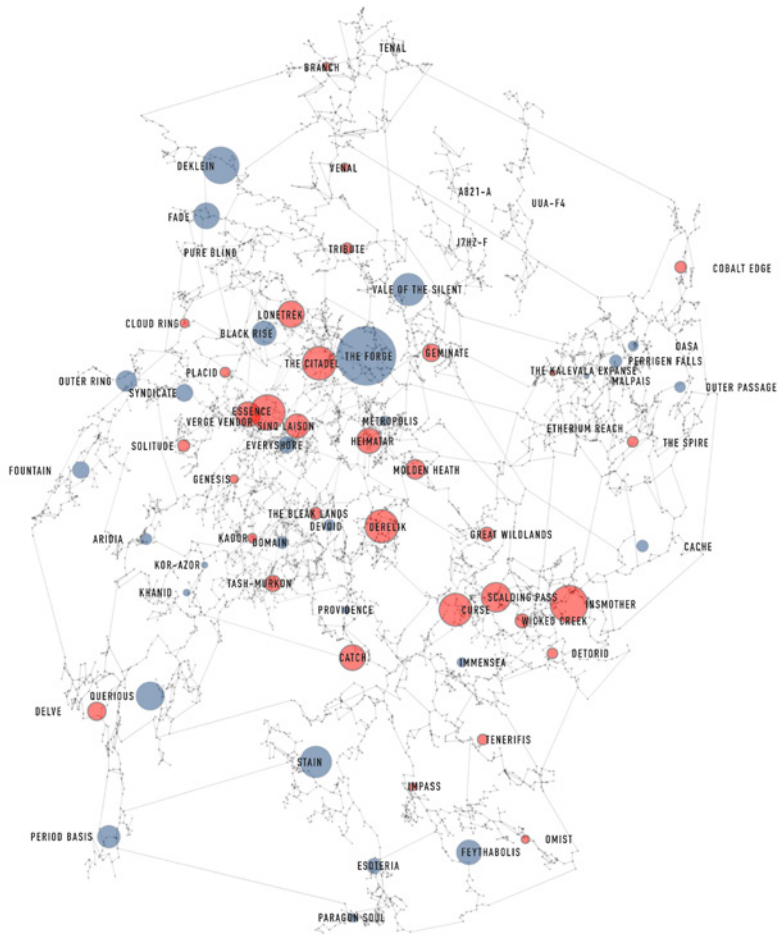


Figure 3: This figure shows changes in the population distribution within known space at the end of Q3 compared to Q2. Blue bubbles represent an increase in the population of that region, while red bubbles represent a population decline. The size of the bubbles symbolizes the magnitude of the change, measured as a percentage of the total population in known space. The largest gain was in the Forge, which gained 0.63% of the total population. The Forge contained 17.25% of the population of known space at the end of Q3. The highest loss was in Insmother, which lost 0.25% of the total population. This takes it down to 0.24% of the population of known space, down from 0.49% at the end of Q2.

THE MONETARY SYSTEM

As EVE grows, so does the money supply. Currently there is a combined total of 400 trillion ISK on all accounts within EVE. Approximately 226 trillion are on active paying accounts and around 30 trillion on accounts belonging to player corporations. The active player is defined here as one that is currently paying for EVE, while the inactive player is someone whose subscription has lapsed. For our purposes, the ISK on active accounts is therefore a better indicator of the current money supply. However, the inactive player can always re-activate. When that happens, the money supply of active players increases.

In the last QEN, we talked a little bit about sinks and faucets in EVE and showed that NPC trade goods had a great impact on the money supply. Insurance payouts have continued to decrease, totaling 1.5 trillion in September compared to 5.9 trillion in May, prior to the insurance system changes. However, despite the drop in that particular ISK faucet, the money supply continues to grow.

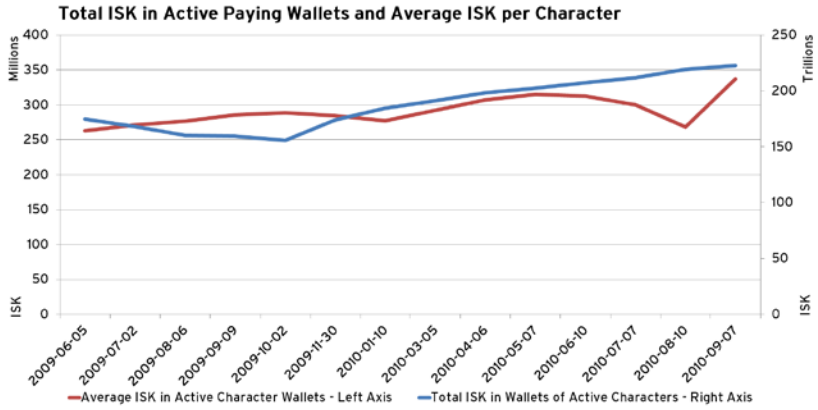


Figure 4: This graph shows the total amount of ISK in the wallets of active characters and the average ISK in each active character's wallet. As we can see, the total amount of wallet ISK has been growing at a steady rate since October 2009. However, there is a dip in the average ISK per wallet from May to August, as many new players entered the game during that period. We are now seeing that trend reverse, however, with the ISK per wallet starting to rise again.

The largest faucet in EVE is the bounty prizes. In Q3 the bounty payout increased by over 16% compared to Q2, which boosted the money supply significantly. This has been a general trend since Dominion, when ratting became more profitable in null security space. Hence, the population has shifted more toward null security space in the past year, where the ratting can be very beneficial.

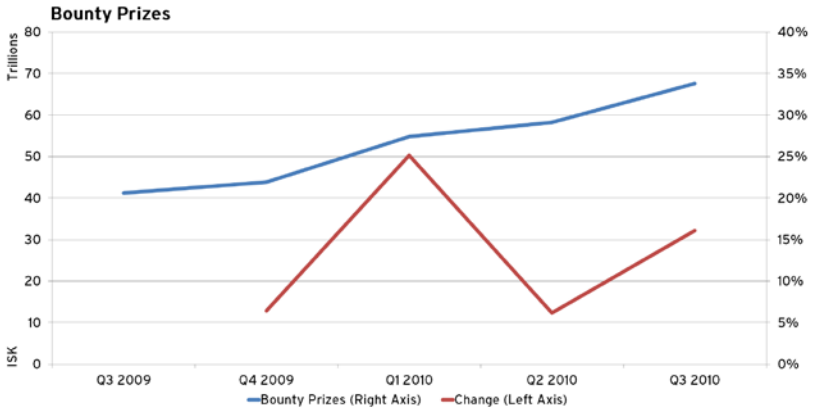


Figure 5: The graph shows the development of bounty prize payouts and the percentage change in each quarter. In only a year the bounty payout increased by 64%, pushing the money supply further up.

Bounty prizes are payment for a service which the players provide for the NPCs. To counter that ISK faucet, the NPCs take service charges, fees, taxes and goods. While a large proportion of the sink comes through NPC-sold goods such as blueprints and skillbooks, in this issue we will take only the LP store into account when referring to NPC goods sold.

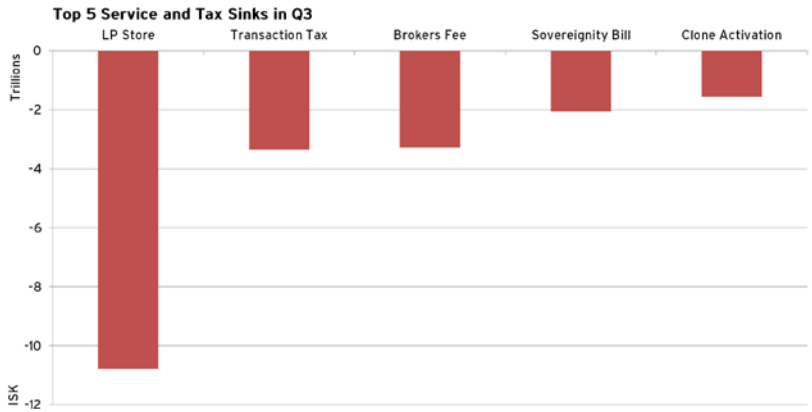


Figure 6: The figure above shows the 5 largest sinks in service charges, fees, taxes and the LP store. These sinks are small in comparison to the 67 trillion bounty faucet in Q3; the total amount for the combined top 5 sinks is only 31% of the bounty payout, or 21 trillion. The largest one is the LP store, accounting for more than 10 trillion, and the smallest is the clone activation, sinking 1.5 trillion ISK in Q3.

PRICE LEVEL CHANGES

All price indices for EVE are calculated as Laspeyres indices, in which the base is updated monthly, based on total trade value of individual items in the previous month. Within each index there is a variety of items, ranging from eight items for the Mineral Price Index to over 4,000 for the Consumer Price Index.

MINERAL PRICE INDEX (MPI)

The Mineral Price Index (MPI) shows the price changes in all eight minerals used to produce ships and other items in EVE. The weight of each mineral in the index changes each month based on the relative trade values of the previous month. Table 8 shows the mineral basket, both for June and September.

	Weight in Index	
	Jun	**Sep**
Tritanium	29.5%	28.9%
Mexallon	17.0%	23.6%
Zydrine	14.1%	11.5%
Pyerite	12.3%	10.4%
Megacyte	11.6%	10.0%
Isogen	6.7%	8.4%
Nocxium	6.3%	5.4%
Morphite	2.5%	1.9%

Table 8: The weights of the minerals in the Mineral Price Index are recalculated every month. The weights can shift a fair bit over a short period of time, as in the case of Mexallon from June to September. A rising price raises a mineral's weight in the index, unless traded quantity falls by a larger percentage.

The MPI fell by 1.4% in Q3. It started with a mild deflation in July, which turned into inflation in August and then back to deflation in September. Low-end minerals were the main driver behind the changes.

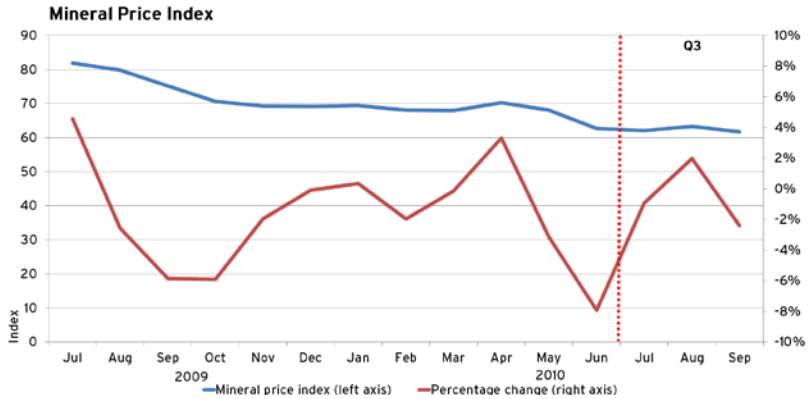


Figure 7: Over the quarter, the Mineral Price Index fell by 1.4%, driven by the insurance changes made last June.

We split minerals into two categories: low-end minerals and high-end minerals. The low-end minerals contain Tritanium, Pyerite, Mexallon and Isogen, while the high-end category includes Nocxium, Zydrine, Megacyte and Morphite.

LOW-END MINERALS

Last June the insurance system was changed drastically. The change involved linking insurance payouts to the cost of the construction materials of each ship. This removed a price floor on minerals, because the market price of ships should not go below the net insurance payout, and therefore the cost of the minerals required to manufacture those ships would be kept up by the fixed ship prices.

The insurance change therefore caused a fall in the prices of minerals. This fall was expected to continue in Q3.

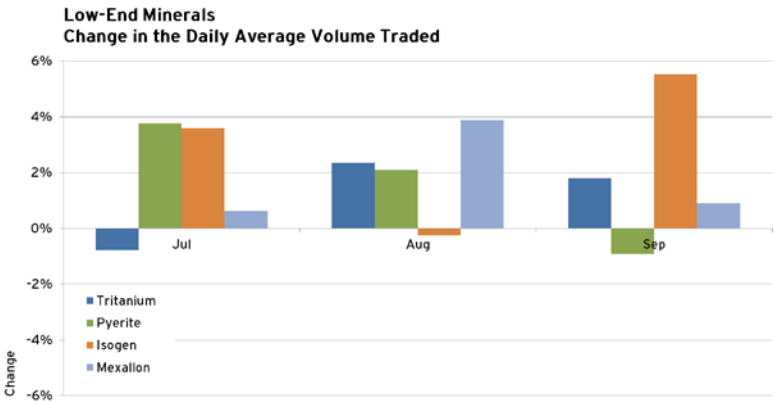


Figure 8: Percentage change in the daily average volume traded of low-end minerals. Trade has picked up slightly following a sharp decline in June, when an artificial price floor, based on insurance, was removed.

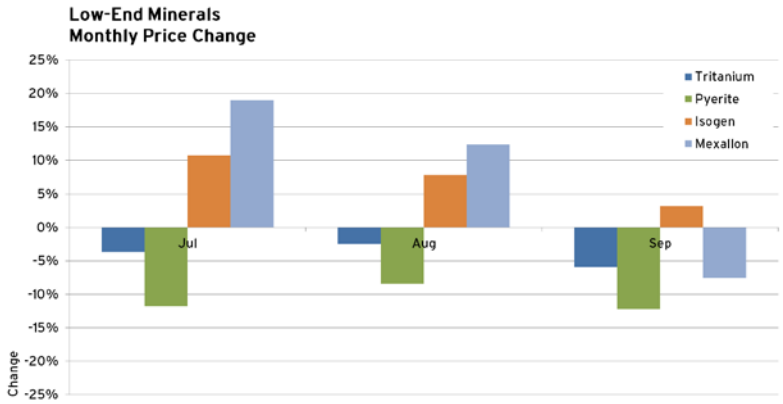


Figure 9: Tritanium and Pyerite prices continued to fall in Q3, but Mexallon and Isogen prices rose somewhat, probably due to reduced supply.

The fall in prices continued throughout the quarter for Tritanium and Pyrite, but at the quarter's beginning Isogen and Mexallon suddenly started to rise. Mexallon rose by 19% in July and by 12% in August, before starting to fall again in September. Isogen rose a little less, but kept rising throughout Q3.

The reasons for this trend are not entirely clear. Traded volume of these minerals rose by only a modest quantity, certainly a far lower percentage than the price increase. The quantity of these minerals used in the production of ships (i.e. the quantity needed for the actual number of ships produced) rose by a few percent from June to July, which was a small recovery from a large drop in ship production in June. Used quantity then started to fall slightly in August and followed that trend in September. This suggests that the reason for the rising price is not to be found on the demand side.

Other adjustments affected mineral supply besides the insurance changes. Drone compounds had their drop rates and reprocessing yield altered, drops of meta 0 loot were reduced and changes were made to asteroids in null security space. This changed the relative supply of the different minerals.

Alternative explanations could be speculative trading or market manipulation. However, speculative trading should be visible as a bigger increase in traded volume than in quantity used, which is not the case here, and manipulating the Mexallon market may be difficult due to its size, as the total traded value of Mexallon is in excess of 3 trillion ISK per month.

HIGH-END MINERALS

The effect of the previously mentioned insurance changes can also be seen on some of the high-end minerals.

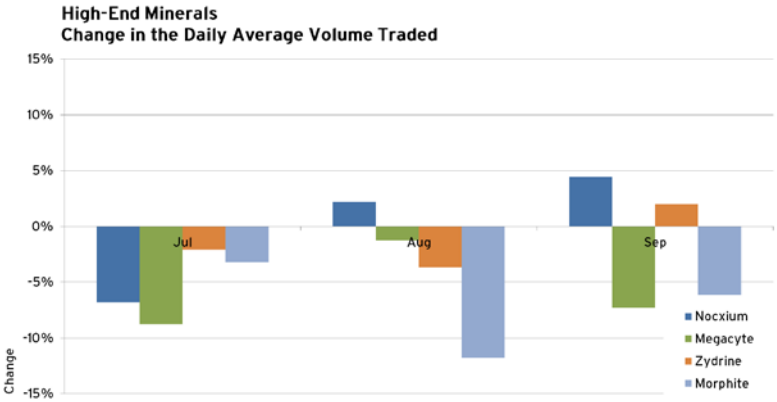


Figure 10: Daily trade volume of high-end minerals falls in Q3, following the insurance changes in Tyrannis.

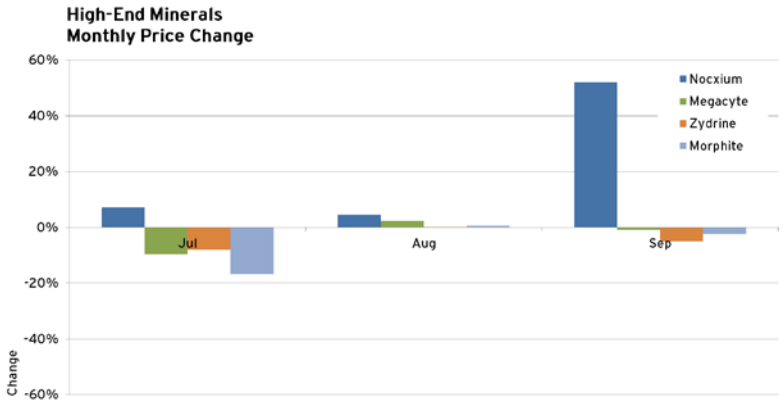


Figure 11: Prices of Zydrine, Megacyte and Morphite fell somewhat in July. The fall seems quite small compared to the 52% upsurge in Nocxium prices in September, which was caused by a combination of reduced supply and market manipulation.

The fall in the prices of Zydrine, Megacyte and Morphite was quite notable in July, ranging from 8% to 17%. The trend stabilized in August but then prices started falling again in September, albeit at a more moderate rate. For Zydrine and Megacyte, this can be attributed to the insurance changes. The same can hardly be said for Morphite, as it is only used in Tech II production, and the prices of Tech II ships were not being held up by the insurance system. The decline in Morphite is more likely to be caused by reduced demand, as Tech II ship production fell between the two quarters.

The most interesting high-end mineral this quarter was Nocxium. It was the only mineral that rose in price in June, despite the insurance changes, and continued to rise in July and August. The most drastic increase came in September, though, when Nocxium prices jumped by 52%. The changes made to drone compounds in June reduced the supply of Nocxium, which naturally raised its price. Realizing that a long-term price increase was taking place, one which would likely create a short term shortage of Nocxium, some enterprising traders played a clever market manipulation. By buying up large parts of the Nocxium available they ensured that a serious shortage of Nocxium was created – or, rather, that the foreseeable shortage was greatly amplified. This took much of the market by surprise, with many a lamentation heard from manufacturers of Tech I goods. This is market PvP at its finest.

PRIMARY PRODUCER PRICE INDEX (PPPI)

The Primary Producer Price Index consists of manufacturing items used for the production of other manufacturing items at the secondary stage. Manufacturing items used for the production of final consumer goods are excluded. The index includes such item groups as drone compounds, moon materials, planetary commodities and items used in invention.

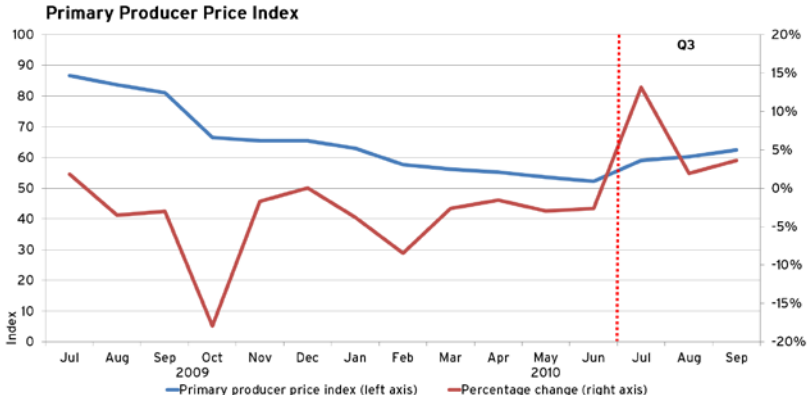


Figure 12: The PPPI rose sharply in July, due to player-made planetary commodities entering the market

Prior to Q3, the price of moon materials had been falling for 11 months straight. Much of that trend was caused by changes to the blueprint requirements of Tech II items, which were announced in October 2009. That long decline came to an end in July and moon material prices have been showing signs of inflation since then.

The index rose sharply in July, or by 13.1%. The driving force behind this was planetary commodities, which rose immensely in price. On average, these commodities rose by 185%. These dramatic changes were symptoms of new products establishing their equilibrium prices, as players first became able to produce them through Planetary Interaction last June. All in all, planetary commodities in the PPPI raised the index by 12.6 percentage points, which represents almost 96% of the rise in the index. Prices came down a bit the following months as producers directed their production toward those commodities that yielded the most income.

Prices of planetary commodities probably won't change drastically until the release of Incursion, but what effect that expansion may have remains to be seen.

SECONDARY PRODUCER PRICE INDEX (SPPI)

The Secondary Producer Price Index contains production materials and other production items that are used in the manufacturing of consumer goods, i.e. goods included in the Consumer Price Index.

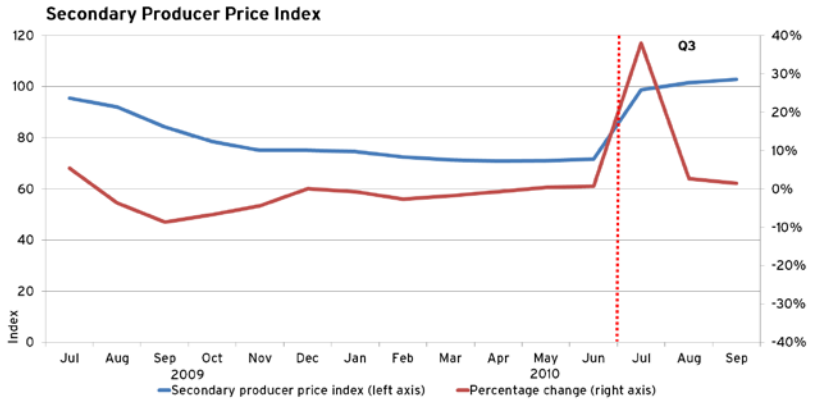


Figure 13: Planetary commodities trying to establish their market price caused a 38% upsurge in the SPPI at the beginning of Q3.

The SPPI showed 38% inflation in July. Planetary commodities were responsible for 96% of that inflation, as their price surged up by 451%. Some of these planetary commodities are new products and others are old ones that were previously sold by NPCs. All of them became producible by players in June, which inevitably brought about a short period of turmoil for their prices while the law of supply and demand worked its magic.

In the following two months, the prices of planetary commodities fluctuated a bit, but far more temperately than before. The net effect of those fluctuations on the SPPI was fairly limited. The main effect on the index came from salvaged materials which rose in price throughout Q3. At the same time, traded volume of salvaged materials from Tech I ships seems to be falling. A possible reason is that fewer mission runners are salvaging the wrecks from their missions, following the reduction in meta 0 loot drops.

CONSUMER PRICE INDEX (CPI)

The Consumer Price Index measures the overall price changes of consumer products. This is not limited to consumables such as fuel, ammunition or PLEXes, but also includes assets such as ships, modules, implants and starbase structures. In summary, anything that is not primarily used to produce other goods is included in the index, which contains over 4000 individual items.

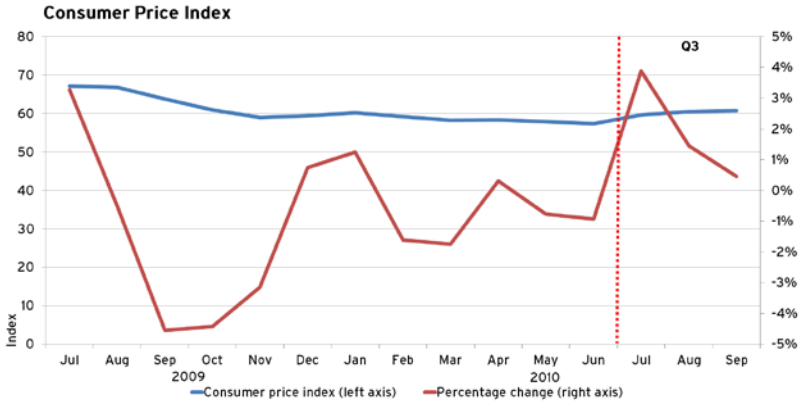


Figure 14: Player-made starbase fuel was the main driver behind the initial inflation in Q3.

In Q3, consumer prices were characterized by inflation. It was strongest at the start of the quarter but diminished to a moderate level by the end of it. The main factor behind the inflation in July was starbase fuel other than ice products. This group only contains five products, but their combined weight is between 2 and 3 percent of the CPI. Since June, these goods are made through Planetary Interaction and as seen in both the PPPI and the SPPI, the price increased a lot after production moved from NPCs to the players. It rose by 182% in July and by 45% in August, but came down a little in September.

While the general trend of planetary commodities has been that of significantly higher prices, the trend does not necessarily apply to all items made from such commodities. For instance, starbase structures have generally fallen in price, although the drop varies a lot from structure to structure.

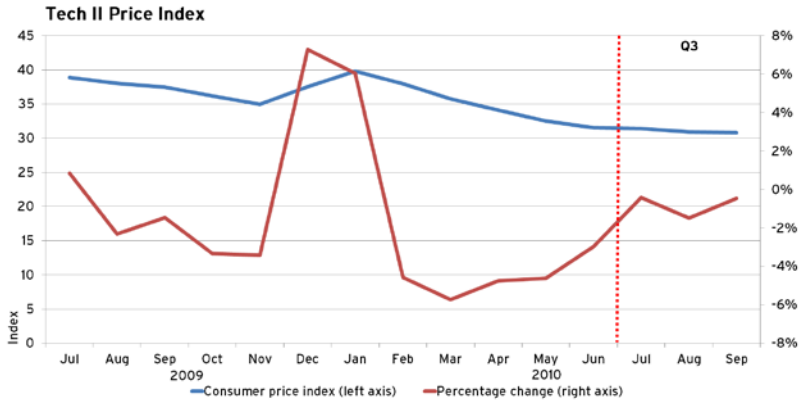


Figure 15: The 11-month decline in Tech II prices seems to be at an end, with prices being fairly stable in Q3.

As stated regarding the Primary Producer Price Index, the price of moon materials fell for 11 months straight but stabilized in Q3. This price development was of course passed on to the Tech II construction components, and from there to Tech II ships and modules. The stabilization of moon material prices is clearly visible in the Tech II Price Index, which moves very little in the quarter. The effect of the Tech II blueprint changes, introduced in Dominion, does therefore seem to be over.

The produced mass of Tech II ships fell by 7.1% from Q2 to Q3, i.e. from 4.38 gigatonnes to 4.07 gigatonnes. The number of produced Tech II ships fell slightly less, i.e. by 3.7%, from 375,293 ships in Q2 to 361,368 in Q3.

SUMMARY

The price development of Q3 2010 was characterized by relative stability, with the notable exception of planetary commodities, which tended to surge quite strongly in July but then began to stabilize. The effects of the Tyrannis changes to insurance, drone compounds and mission loot were still being felt in the quarter. On the other hand, the effect of the Dominion changes to the construction requirements for Tech II items seems to be over.

MEASURES OF SUCCESS

The ships flown by the pod pilots of New Eden vary greatly in their size, role and the efficiency with which they perform different tasks. This chapter focuses on the popularity and effectiveness of ships in PvP combat. Single-month figures are based on data from July 2010. The final blow measure has its limitations, as it ignores all other participants in the kills. However, the large number of observations involved should significantly reduce the effect of randomness in the result.

Table 9 shows the top 20 ship types that landed final blows in PvP combat last July, excluding shuttles and rookie ships.

	Ship	Final Blows
1	Hurricane	29,346
2	Drake	24,012
3	Vagabond	13,296
4	Zealot	11,800
5	Sabre	10,919
6	Harbinger	10,888
7	Dramiel	8,675
8	Rifter	6,350
9	Cynabal	6,139
10	Thrasher	4,773
11	Tempest	4,468
12	Megathron	4,207
13	Rupture	4,061
14	Armageddon	4,039
15	Hound	3,962
16	Myrmidon	3,831
17	Abaddon	3,668
18	Loki	3,622
19	Manticore	3,622
20	Tengu	3,611

Table 9: Ships landing final blows in PvP in July 2010. Shuttles and rookie ships are not counted as kills. Minmatar ships dominate the list, which is interesting considering the criticisms often leveled at them.

The table shows the Hurricane battlecruiser on top, having scored 22% more kills than the runner-up, the Drake. Even more striking is the fact that the Hurricane has 121% more kills than the Vagabond, which is in third place. In first and third place are Minmatar ships, half the ships on the top 10 are Minmatar, and looking at the top 20, Minmatar ships make up 45% of the list. When it comes to dishing out damage, there's something to be said for the effectiveness of Minmatar ships in PvP.

The Dramiel, in 7th place, is an interesting entry on the list. It's a frigate of the Angel Cartel, built for damage and speed, having a 100% bonus to the damage of small projectile turrets, in addition to tracking and falloff bonuses. The fact that this frigate costs as much as a tier 2 battleship doesn't seem to detract much from its popularity.

Table 10 shows the top 20 ship types destroyed in PvP in July, excluding shuttles and rookie ships.

Ships Destroyed

	Ship	Number Destroyed
1	Drake	14,057
2	Rifter	11,724
3	Hurricane	10,162
4	Harbinger	4,660
5	Thrasher	4,643
6	Kestrel	4,403
7	Manticore	4,040
8	Myrmidon	3,783
9	Caracal	3,524
10	Thorax	3,053
11	Bestower	2,984
12	Rupture	2,926
13	Merlin	2,807
14	Punisher	2,768
15	Catalyst	2,693
16	Vexor	2,668
17	Incursus	2,650
18	Dominix	2,648
19	Raven	2,644
20	Hound	2,510

Table 10: Top 20 ship types most frequently destroyed in PvP in July 2010. Shuttles and rookie ships are excluded.

This time, the Drake tops the list by a considerable margin. This is undoubtedly a measure of the ship's popularity rather than a sign of its weakness, as it is one of the most common ships around. As evidence of that, the 14,057 Drakes lost in July should be compared to the 24,381 final blows made by Drakes in the same month. That's a kill ratio of 1.7 for the Drake. By comparison, the Hurricane has a kill ratio of 2.9 and the Vagabond has a ratio of 5.9. The sub-capital ship with the highest kill ratio last July was a fairly uncommon ship, the Panther, a Minmatar Black Ops battleship. With 144 kills and only 5 losses, it has a kill ratio of 28.8, with its cloaking ability no doubt playing a key role in keeping the ratio high

The only non-combat ship on the top 20 is the Bestower, in 11th place. The next ones are the Retriever in 22nd place, the Badger Mark II in 23rd and the Hulk in 29th. The most commonly destroyed faction ship is the previously mentioned Dramiel frigate. A total of 1,787 Dramiels were lost in July, but Dramiels scored nearly 5 times as many final blows in the same period. Overall, a key characteristic of high-ranking ships on the list of final blows is high damage output for low cost. In the case of the Drake, its tanking ability also plays an important role.

A more economic way to compare the performance of ships in PvP would be to calculate the total cost of the ships destroyed by each type of ship. This calculation uses the average market price for ships tradeable on the general market, an estimate of the price of ships only tradeable through contracts, and estimated production cost of supercapitals. Modules destroyed were not taken into account. The one exceptionally rare Utu, which was destroyed by a Daredevil in July, did not get valued either.

Value Destroyed by Ship Type

	Ship	Final Blows
1	Drake	792,253,201,887
2	Hurricane	697,866,118,714
3	Vagabond	332,522,195,159
4	Zealot	275,917,678,373
5	Harbinger	212,130,375,875
6	Nyx	183,884,510,789
7	Tempest	169,511,052,505
8	Megathron	166,477,532,052
9	Armageddon	163,722,209,591
10	Cynabal	137,916,009,398
11	Abaddon	131,418,340,790
12	Tengu	129,919,156,064
13	Hound	125,973,815,815
14	Typhoon	120,174,869,095
15	Machariel	115,345,443,752
16	Manticore	106,285,091,106
17	Brutix	104,774,847,725
18	Dominix	100,074,121,139
19	Raven	98,789,821,047
20	Sleipnir	95,124,631,649

Table 11: The value of ships destroyed in PvP, ranked by ship type landing the final blow. The total value of ships destroyed in PvP in July was 6.9 trillion ISK, not counting modules or starbase structures.

This comparison puts the Drake on top, 14% above the Hurricane, which comes in second. There's a major gap between these two battlecruisers and the next ships on the list. The value destroyed by the Vagabond, in third place, is only 42% of what the Drake has to its credit. Similar to the kill ratio, mentioned earlier, we can construct an "economic ratio," or the value destroyed by ship type divided by the value lost of that ship type. This gives the Drake an economic ratio of 2.2, the Hurricane a ratio of 2.6 and the Vagabond a ratio of 1.4.

	Ship	Value Destroyed by Ship Type	Value Destroyed of Ship Type	Economic Ratio
1	Executioner	1,386,539,234	60,810,237	22.8
2	Catalyst	34,252,472,377	1,940,884,056	17.6
3	Thrasher	63,326,794,876	3,971,565,634	15.9
4	Rifter	30,283,034,794	3,420,456,816	8.9
5	Incursus	3,993,510,995	559,180,785	7.1
6	Maulus	284,078,240	40,814,631	7.0
7	Aeon	51,689,945,384	8,060,891,028	6.4
8	Punisher	4,620,733,095	721,015,047	6.4
9	Coercer	5,822,019,652	945,605,711	6.2
10	Tristan	1,962,499,511	323,298,274	6.1

Table 12: The "economic ratio," value destroyed per ship type, divided by value lost of the same ship type. Tech I frigates and destroyers dominate the list due to low cost and suicide ganking.

The economic ratio Top 10 list is 90% composed of Tech I frigates and destroyers. The low price of these ships helps to keep the ratio up, and their use in suicide ganks undoubtedly helps too, especially since value lost to CONCORD is not counted. It should be noted that some ships which caused great destruction had no losses that month and therefore can't have their economic ratio calculated.

As is to be expected, some of the smaller ships that made the top 20 list in table 9 drop off the list when value is taken into account. These include the Dramiel, the Rifter, the Thrasher and the Sabre. The heavy hitters move up instead; for instance, the Nyx supercarrier comes in at number 6, the only capital ship on the top 20. Of the value destroyed by the Nyx, almost 94% was from other capital ships.

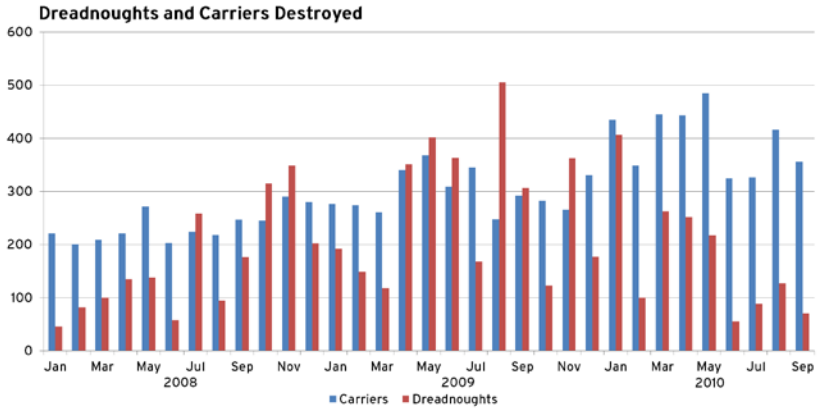


Figure 16: The number of carriers destroyed has been growing slowly, while the number of dreadnoughts has varied more and has recently fallen sharply.

Figure 16 shows carrier and dreadnought destruction since 2008. Carrier losses have been growing gradually over the years, while dreadnought losses decreased substantially following Dominion. The reason may be an increased focus on supercapitals as damage dealers after that expansion.

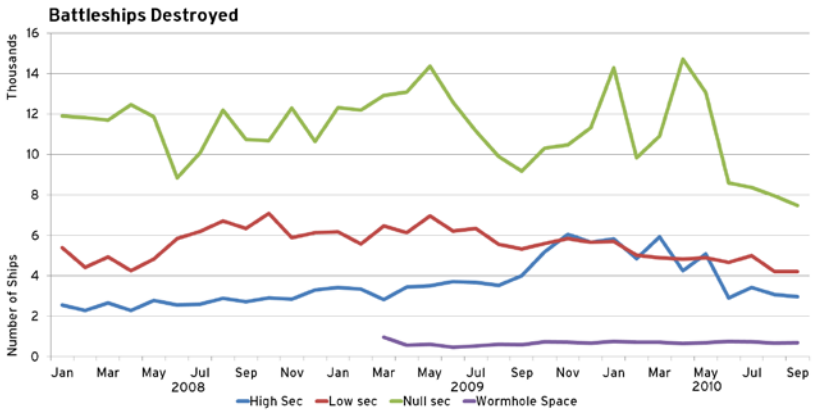


Figure 17: The number of battleships destroyed in null security space fluctuates a lot, while battleship losses in other types of space are far more stable. The spike in losses in high security space is attributed to the old insurance system, which sometimes made ship losses profitable. This system was changed in June, when insurance payouts were linked to the construction cost of the ships. As a result, the spike ended right there.

The destruction of battleships can fluctuate quite a bit in null security space, based on the wars being waged, but tends to be a more stable affair in other types of space, as seen in figure 17. The graph shows a considerable exception to the stability of the carnage in high security space, a spike that starts in October 2009 and ends abruptly in June 2010. The last QEN contained a graph showing the number of ships that were self-destructed, which spiked in exactly this period. This period is a time when the market price of certain ships fell below the net insurance payout for losing those ships, making it profitable to insure them and self-destruct them. The spike seen here in battleships destroyed in PvP in high security space is most likely "assisted self-destruction," i.e. fellow corporation members destroying ships to provide the owner with the insurance payout. This may be feasible to bypass the self-destruction timer – or just simply good fun.

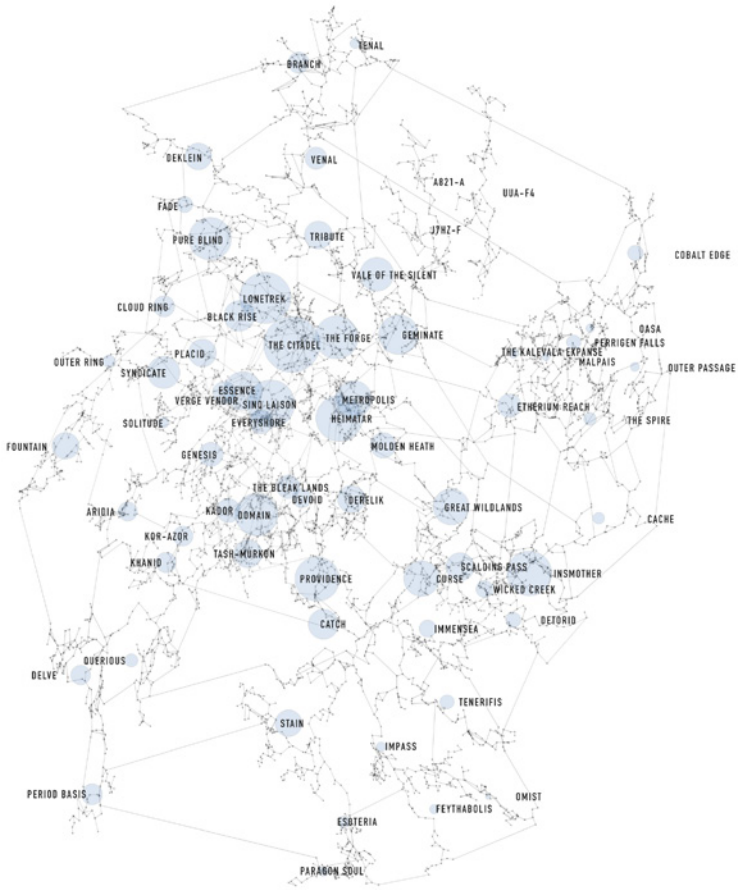


Figure 18: Total value of ships destroyed in PvP in each region in July 2010. The bigger the bubbles, the greater the value destroyed. More value is generally destroyed in empire space than in null security space, largely because of the population factor. The figures for the various null security regions undoubtedly vary significantly from month to month, based on the wars being waged.

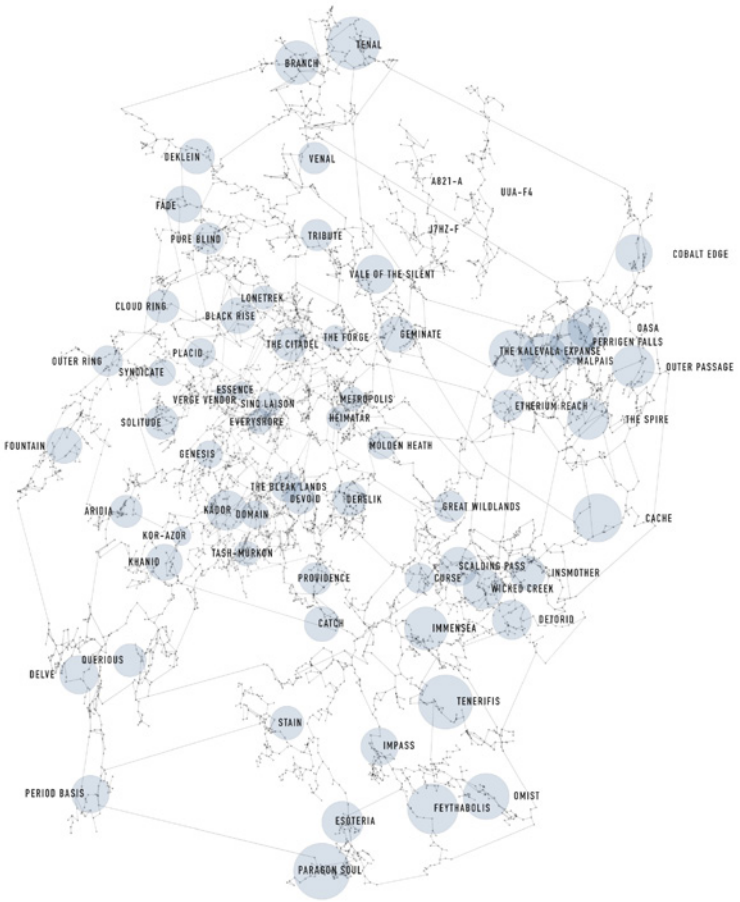


Figure 19 : Average value of ships destroyed in PvP in each region. Larger bubbles mean that on average more expensive ships were destroyed. Unsurprisingly, there is a tendency for more expensive ships being lost in null security space where most capital ship engagements take place. The average wealth of the inhabitants undoubtedly plays its part as well.

SUPERCAPITALS

Supercarriers and titans are the largest, most expensive and most dangerous ships in New Eden, and also the hardest targets to destroy. Nevertheless, supercapitals do go down. How commonly does it happen, though? Figure 21 shows supercapital destruction since 2008.

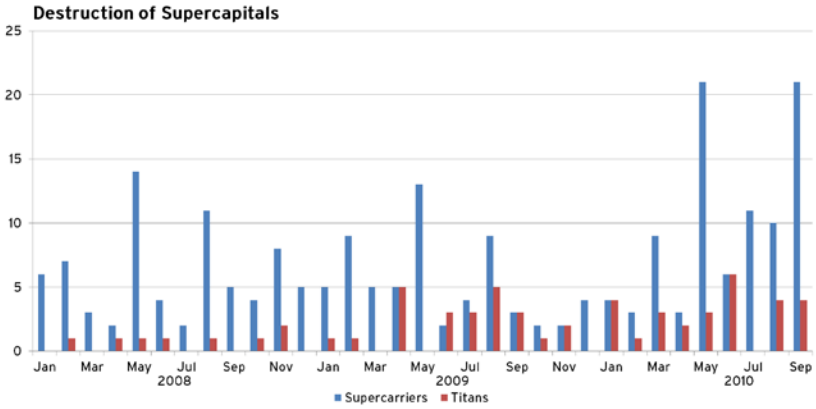


Figure 20: Supercarrier losses are generally trending upwards, although losses fell around the release of Dominion, when changes were made to supercapitals and sovereignty mechanics.

The number of supercapitals destroyed each month fluctuates quite a bit from month to month, as the numbers involved are quite small and the outcome of a single fleet battle can therefore affect the total number considerably. However, the trend is that of rising numbers, although there was a noticeable decrease in these losses around the release of Dominion.

While taking down a titan is inevitably a group effort, getting the final blow on such a ship is a matter of some prestige. Table 13 shows which ship types score final kills on titans.

SHIPS LANDING FINAL BLOWS ON TITANS

	2008	2009	2010	Total
Dreadnoughts	5	15	4	24
Battleships	2	6	4	15
Titans		1	9	10
Supercarriers			7	7
Carriers			2	2
Stealth Bombers			1	1
Heavy Interdictors	1			1
Battlecruisers		1		1
Heavy Assault Ships		1		1
Total	**8**	**24**	**27**	**62**

Table 13: The ship group scoring the most final blows on titans has changed from dreadnoughts in 2008 and 2009 to titans in 2010, followed by supercarriers. This is due to changes to supercapitals made in Dominion.

Dreadnoughts are no longer the most common titan killers. That distinction now goes to titans and supercarriers. This was due to supercapital changes from January 2010 which gave supercapitals a big hit point increase, changed the titan doomsday weapon from being an area-of-effect weapon to doing focused damage, and, finally, introduced fighter bombers for supercarriers.

The supercapitals destroyed are being replaced at a phenomenal rate, as figure 22 shows.

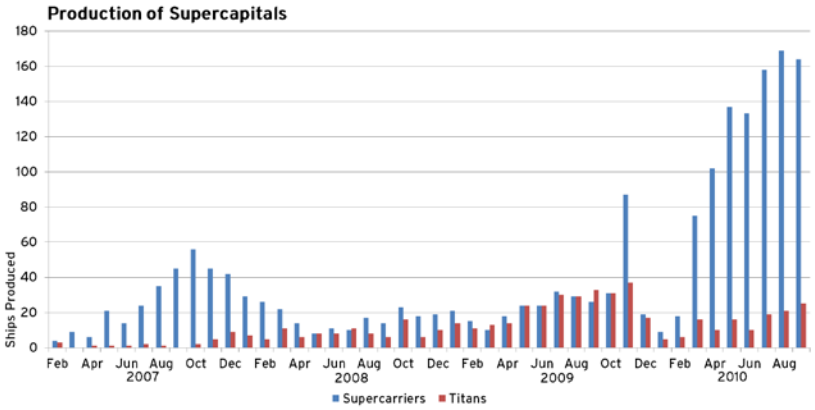


Figure 21: The production of supercarriers has grown immensely, following changes made to the ship class in January 2010.

Supercapital production rose gradually from March 2008, with almost an equal number of titans and supercarriers built each month until November 2009. That month, the number of supercarriers rose by 180%, but the following three months saw a major drop in supercapital production. The reason for the decline in production can be attributed to sovereignty mechanic changes in Dominion.

Before Dominion, constellations under the control of player alliances could reach a status called Sovereignty 4, which made the control towers of the alliance unassailable unless the attackers would first bring the Sovereignty status below 4. This made supercapital production in such constellations a very safe business. The removal of this mechanic in Dominion caused much concern among players about the risk of losing their immensely expensive supercapitals while still in production, and this led to far fewer supercapitals being produced in the months that followed. Titan production is still well below what it was before the changes. The supercapital changes of January 2010, however, led to a massive boost in the popularity of supercarriers, to the point where over 300 supercarriers have been produced in the last two months.

SURVIVING DEFEAT

Pod pilots are obviously named after their pods, devices meant to save their lives in case their ships explode. Of course there's no guarantee the pod will suffice, but it does give the pilot an extra chance to get out safely. So, how likely are you to get killed (i.e. pod killed) if your ship is taken down by other players?

Figure 22 shows an estimated chance of getting pod killed as a result of PvP ship loss. There is a stark difference between areas of different security levels. It should be noted that these figures are somewhat inflated, because they also include the destruction of pods that were being used for travel and as such were not in space because the pilot's ship had been destroyed. These estimates of the risk of pod kills should therefore be taken with a grain of salt.

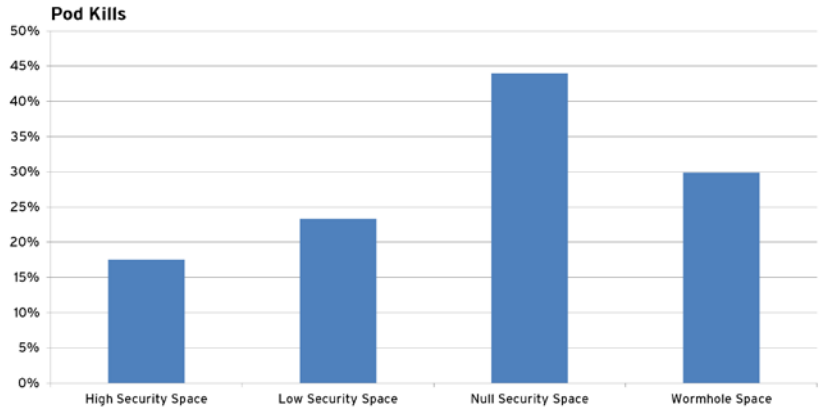


Figure 22: Pod kills as a percentage of PvP ship kills. The increased risk caused by warp disruption fields is clearly visible for null security space and wormhole space.

The pod kill ratio is the lowest in high security space, at 17.5%. Kills in high security space can be based on wars (including factional warfare), kill rights based on criminal acts perpetrated by the victim, and on legal disobedience (i.e. suicide ganking). Of these, only wars give the legal right to destroy pods, which does much to keep this ratio low.

Low security space has a somewhat higher pod kill ratio, at 23.3%. The laws regarding warfare are the same there as in high security space, but the repercussions of disobeying them are quite different due to the absence of law enforcement vessels. Nevertheless, the unavailability of warp disruption fields and the lightning-fast align time for pods mean that the pod kill ratio is still quite low.

Null security space has the highest pod kill ratio. The main reason is the use of warp disruption fields which prevent ships and pods in their area of effect from warping. An essential part of any respectable null security gatecamp, these bubbles raise the pod kill ratio to 44%.

The pod kill ratio of wormhole space is 29.9%. As in null security space, no laws apply and anything goes, including warp disruption fields. Nevertheless, the diffence in the ratio is still considerable. While warp disruption fields are deployable in wormhole space, the opportunity for gate camps is limited to the wormholes, which will come and go and need to be scanned down.

STARBASE LOSSES

Starbases serve a multitude of functions such as production, research, transportation, defense, and, until Dominion, territorial claim. As such, they are often the target of players' fury. Figure 23 shows that starbase kills have been increasing in high security space and wormhole space, while low security space only fluctuates in the short term.

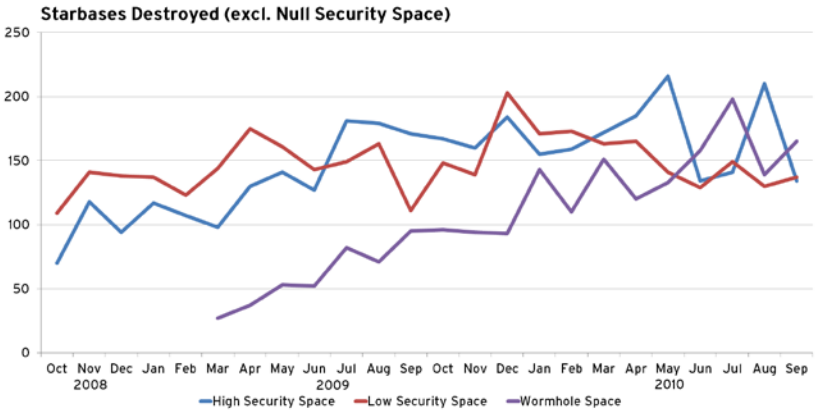


Figure 23: Starbases destroyed in low security space spiked somewhat following Dominion, which altered the value of moons by making changes to Tech II blueprint requirements. Starbase warfare in wormhole space continues to grow.

It is increasingly popular to have starbases in high security space, where they are used for research and manufacturing. Placing them close to the market hubs saves on logistics but also increases the risk of others wanting to take the spot for themselves. Over the first three quarters of 2010, an average of 167 starbases were destroyed in high security space each month. The peak in May counted 216 such losses.

The primary use of starbases in low security space is that of moon mining, and the right types of moons can yield quite a substantial income. Holding some of the more valuable moons therefore requires considerable martial strength. The average number of starbases destroyed has been lower in low security space than in high security space since July 2009. The exception is the spike from last December to February, following the Dominion expansion. Dominion introduced changes to the ratios of materials required for Tech II production, which naturally resulted in changes in the value of moons. Instead of finding themselves among the nouveau riche, many holders of moons

that rose in value found themselves under attack from some of the biggest players in New Eden. The relatively low rate of starbase kills in low security space suggests that the pecking order is fairly well established, with the most valuable locations already belonging to the strongest parties.

Since the introduction of wormhole space in March 2009, pilots have been making themselves more and more at home there, with starbases providing production facilities and a limited degree of safety. These starbases have been getting destroyed in ever-increasing numbers; their destruction is now more frequent than in low security space and is just about to pass the frequency of destruction in high security space.

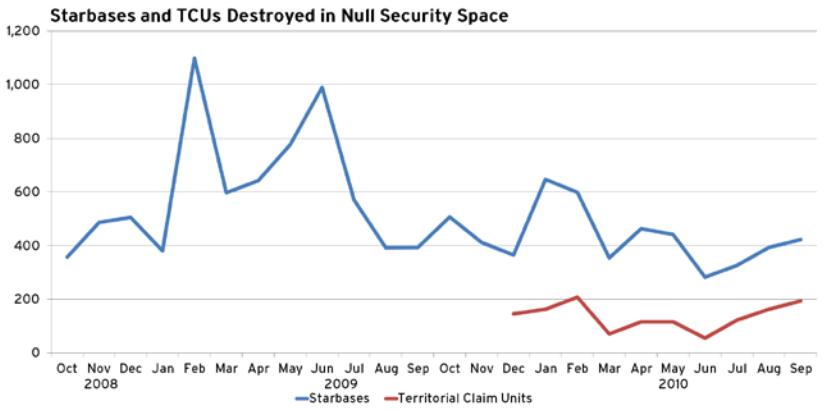
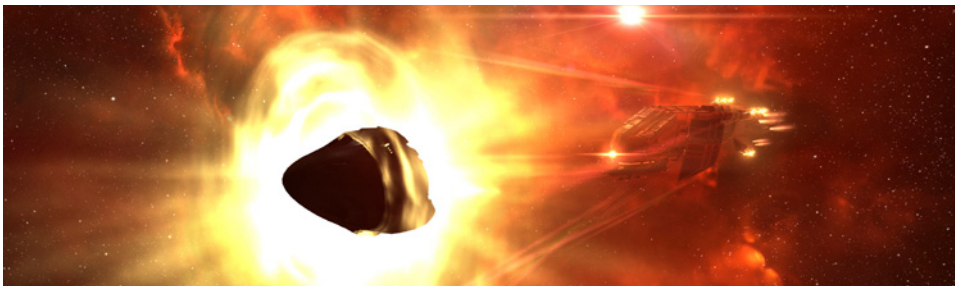


Figure 24: The number of starbases lost in null security space fluctuates much, based on the political situation. The introduction of Territorial Claim Units has not reduced starbase warfare by much.



Starbase destruction in null security space is subject to bigger spikes than elsewhere, due to the scale of the wars waged there. Figure 24 shows some noteworthy moments in the history of null security space. The spike in February 2009 is the result of the infamous stroke of meta-gaming in which Goonswarm disbanded Band of Brothers (BoB). This was followed by an invasion that saw a 188% increase in starbases destroyed. The reason for the second spike of 2009 seems to have been the fall of Red Alliance to Atlas, as well as more fighting in BoB's old territories. In January 2010, IT Alliance invaded Goonswarm space to retake the old BoB holdings, and on February 3, the Goons did it to themselves and disbanded, leaving quite a few starbases to mop up.

With Dominion, starbases stopped giving territorial claim and the aptly named Territorial Claim Unit was introduced solely for that purpose. So far, this seems to have had only a minor effect on the number of starbases destroyed, but since the introduction of Territorial Control Units an average of 136 of them have been destroyed each month. This would suggest that the majority of starbases in null security space were there for industrial reasons, even before the changes to the sovereignty mechanics.

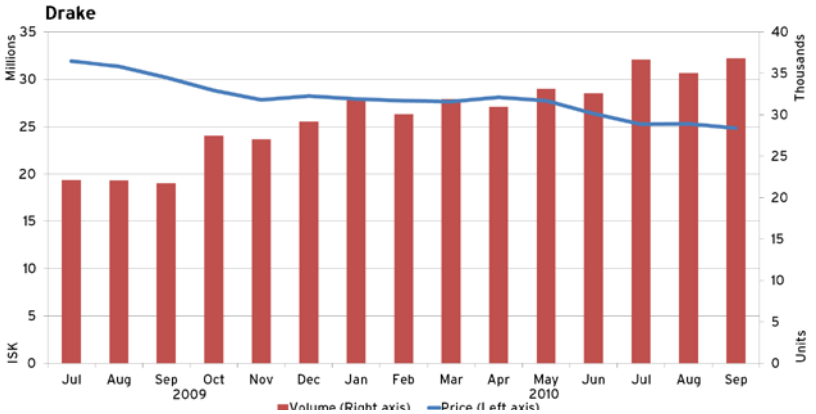


Figure 25: The Drake, a Caldari battlecruiser known to be relatively easy to train for, is one of the most popular ships in EVE. Over the past year the Drake's trade volume has risen to over 35,000, up from around 23,000 a year ago. The average price of the Drake has been going down, however, and in Q3 the price decreased by 8% compared to Q2.

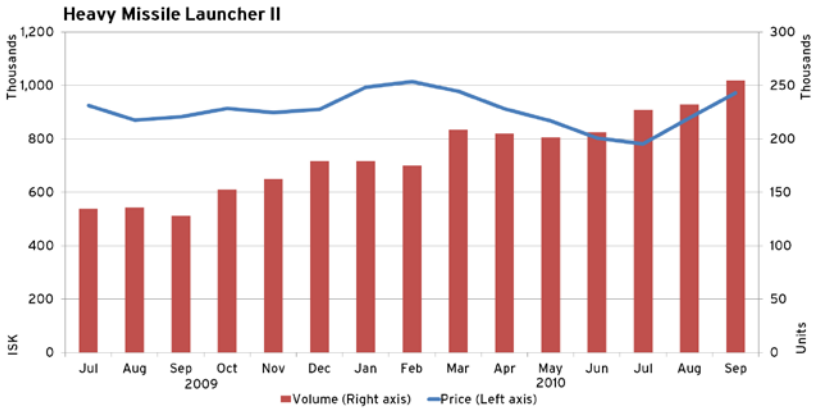


Figure 26: As there are many Drake PvP pilots flying around, we wanted to take a look at a module Drake pilots might prefer. It does not have a high rate of fire, but makes up for it with a large missile capacity. Demand for this module has been increasing steadily, and in September over 250,000 were sold. As a result, the price rose by 21% in from July to September.

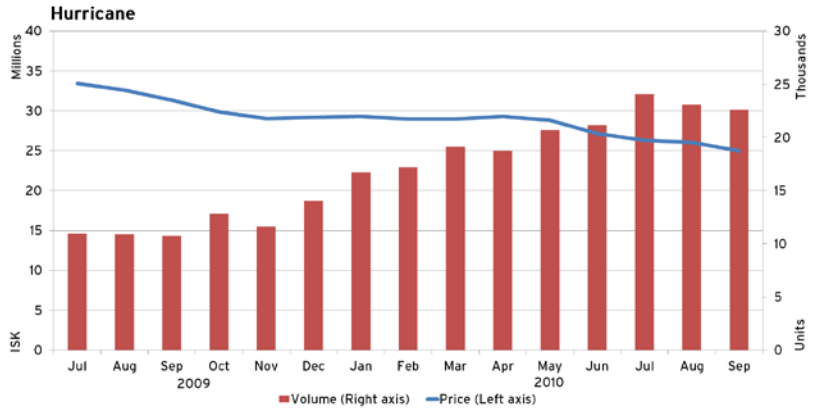


Figure 27: The Hurricane is another popular PvP ship and the ship that had the most final blows in PVP in July. Since Dominion the demand for Hurricanes has increased, and in Q3 the volume traded rose by 15% compared to Q2. This price development is similar to that of the Drake, with the price continuing to decrease. In Q3, the average price of a Hurricane decreased by 3.5% compared to Q2.

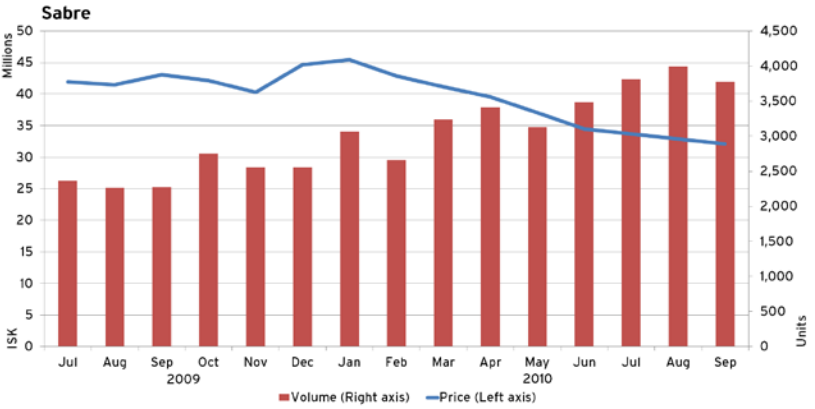


Figure 28: The Sabre is an interdictor, which are destroyer-sized vessels built to fill the single important tactical niche of breaching the enemy's warp tunnels. The Sabre has proven to be one of the more popular PvP ships, making the top 20 list of ships scoring final kills. The volume traded increased by 15.6% in Q3 compared to Q2, while at the same time the price decreased by 11% compared to Q2.

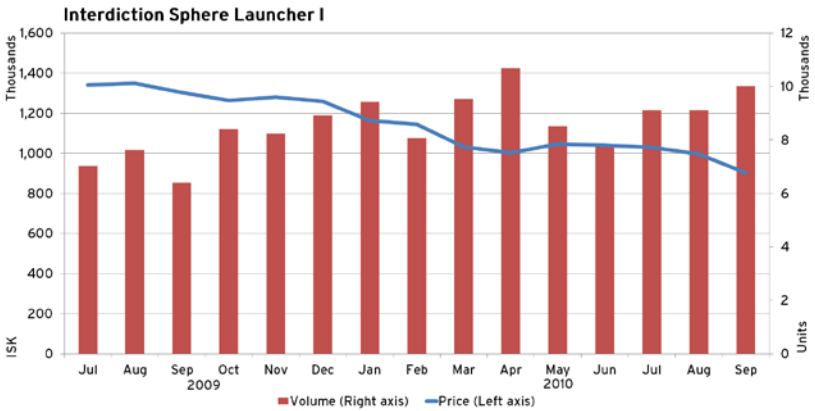


Figure 29: Sabre pilots often use the Interdiction Sphere Launcher to produce a warp disruption sphere capable of pulling passing vessels out of warp. The price of the Interdiction Sphere Launcher decreased in Q3 by 5%, which can be attributed to the decline in the Mineral Price Index. At the same time, the volume traded increased by 4.5%.

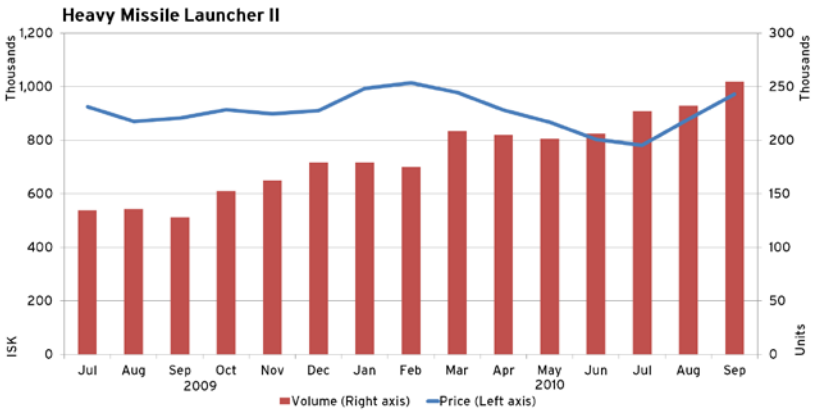


Figure 30: PLEXes continue to be very popular and in Q3 the volume traded increased by 11%, reaching over 80.000 total trades in September. The popularity of PLEXes has increased in every single quarter since they launched, and Q3 didn´t change that. In Q3 PLEX activations increased by 7% compared to Q2, but at the same time more PLEXes are being created than activated. The increased interest in PLEXes led to a rise in both prices and volume traded (6.6% and 11%, respectively) compared to Q2.

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