



Crown of Glory Emperor's Edition

The Advanced Economy



Help and Advice for the New Player

*Bryan Morgan
May, 2009*

Introduction

This guide is NOT the definitive statement on the COG:EE Advanced Economy. Instead, it is intended for those newer players who are confused about the Advanced Economy, but want more involvement in the game than the Standard Economy provides.

The economic model is very complex, but still understandable. Fortunately, you don't need to understand everything to have an enjoyable experience with the Advanced Economy. There are a few tricks, traps, and techniques that will help you start using the Advanced Economy, so that you can master it over time. And, you don't need to be a master of the economy to enjoy the game; you just need to be able to make a few critical decisions now and then. Once these are made, the game pretty much progresses on its own without constant intervention.

Constantly refer to the Appendix of the game manual. It is well written and provides excellent information about the details of the Advanced Economy, including many that are not discussed here.

The critical part of running the economy is what you do the first turn. After that, all you ever really need to do is make adjustments when lose you a province, capture a province, have enemy troops in some of your high producing provinces, or when you need to stockpile to buy a specific unit, or are running low with one or more resources. A check on it every six months or so, is all you need to do otherwise.

First Turn Activities

So let's take a look at what you might do when you ***start a new game***.

- Step 1 – Check your stockpile of resources.
- Step 2 – Check your current cash status.
- Step 3 – Set your desired draft rate to see the impact on cash receipts.
- Step 4 – Set your tax rate.
- Step 5 – What you can do if you're still short of cash.
- Step 6 – Set initial production work orders.

Disclaimer: This guide was prepared by an unpaid beta tester. It is provided merely to help those who are having difficulty getting started with the advanced economy. The strategies and techniques described herein are his alone. The examples are from the 1805 Economic Challenge scenario in the original, un-patched release, unless stated otherwise.

Let's look at each one in more detail. The first examples are from the 1805 Economic Challenge Scenario for Britain.

Step 1: Check your stockpiles of resources.

In other words, see what you start with. It's very important that you do this before you do anything else in the game.

After starting a game with the Advanced Economy option on, when you get to the Main Screen (the map of Europe), you'll see something like this at the bottom:



The icons and numbers at the bottom indicate your beginning resources. Notice you have 900 Money, and much smaller amounts of all the others. Keep in mind that the cash is what the player begins with “in the bank,” if you will. If the country spends 250 per month more than it brings in, it will be bankrupt in 4 months. That's a disaster. So, don't get too excited with that amount just yet. Keep this in mind as we move along.

Also keep in mind that your goal in the game is to generate enough of everything you need to provide sustenance to your people and your troops every month, while also stockpiling resources to build your economy and purchase additional units. You generally have insufficient amounts of everything else, at this point, and have to start producing right away. We'll do that in Step 6. For now, just get a general idea of what you have.

This province, Anglia, will grow in population as the game progresses and if you are generating a little extra food each month above what you need. You have a population (called “men” in the documentation”) of 15 and can currently support 18. It also has a very good forage capacity. This means you won't need to have a depot here, except perhaps in winter if you have a force of more than 40,000 present.

Let's move on to the Step 2.

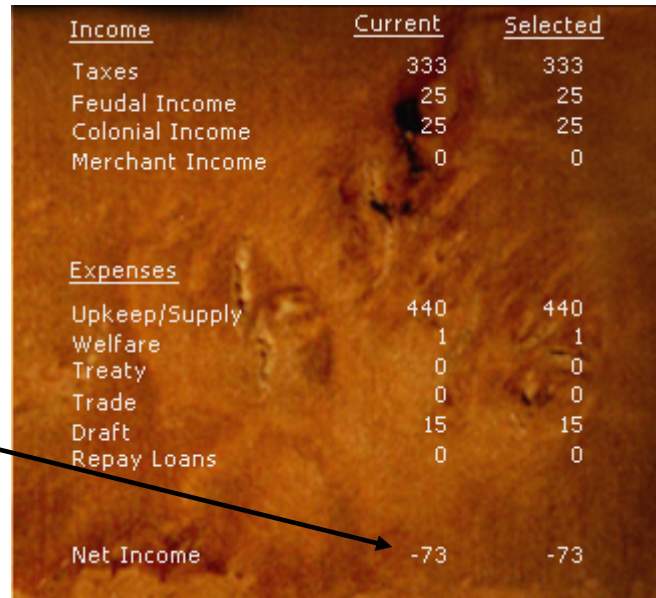
Note that if you load the same scenario from the same release version and with the same beginning options, your figures may vary from what you see here. There is a bit of randomness in the system that you'll see reflected now and then.

Step Two: Check your current cash status.

Before we worry about anything else, let's see how much cash we should generate each month to keep from going broke. Remember, money is needed to buy new units, pay your troops, purchase developments for your provinces, support your friends, and to trade for those items you can't produce enough of on your own.

Open the *Economic Advisor Screen*

Here is what you might see on the right side of the Economic Advisor Screen. This is the most important report of the economic system, because it tells you how solvent your nation is. Look at the bottom line. This country, Britain, will have a deficit of cash income during the first month. (73 of the 900 will be gone!) But, if the amount is already over 100 or so, you're probably fine for a few months, unless your beginning pooled cash is very low, say 200 or so.



The screenshot shows a table with three columns: 'Income', 'Current', and 'Selected'. The 'Income' section lists Taxes (333), Feudal Income (25), Colonial Income (25), and Merchant Income (0). The 'Expenses' section lists Upkeep/Supply (440), Welfare (1), Treaty (0), Trade (0), Draft (15), and Repay Loans (0). The 'Net Income' is shown as -73 in both the 'Current' and 'Selected' columns. An arrow points from the text '73 of the 900 will be gone!' to the -73 value.

<u>Income</u>	<u>Current</u>	<u>Selected</u>
Taxes	333	333
Feudal Income	25	25
Colonial Income	25	25
Merchant Income	0	0
<u>Expenses</u>		
Upkeep/Supply	440	440
Welfare	1	1
Treaty	0	0
Trade	0	0
Draft	15	15
Repay Loans	0	0
Net Income	-73	-73

You will need to take quick action to get this as high as you think you will need to do all the things you'll want to do. You'll learn this by experience. For now, let's get it above 100. I prefer at least 150 if I'm going to build any depots to support my units in the first four or five turns. In later turns we can adjust it some if we see it's not enough. As it is now, you'll be broke in a year.

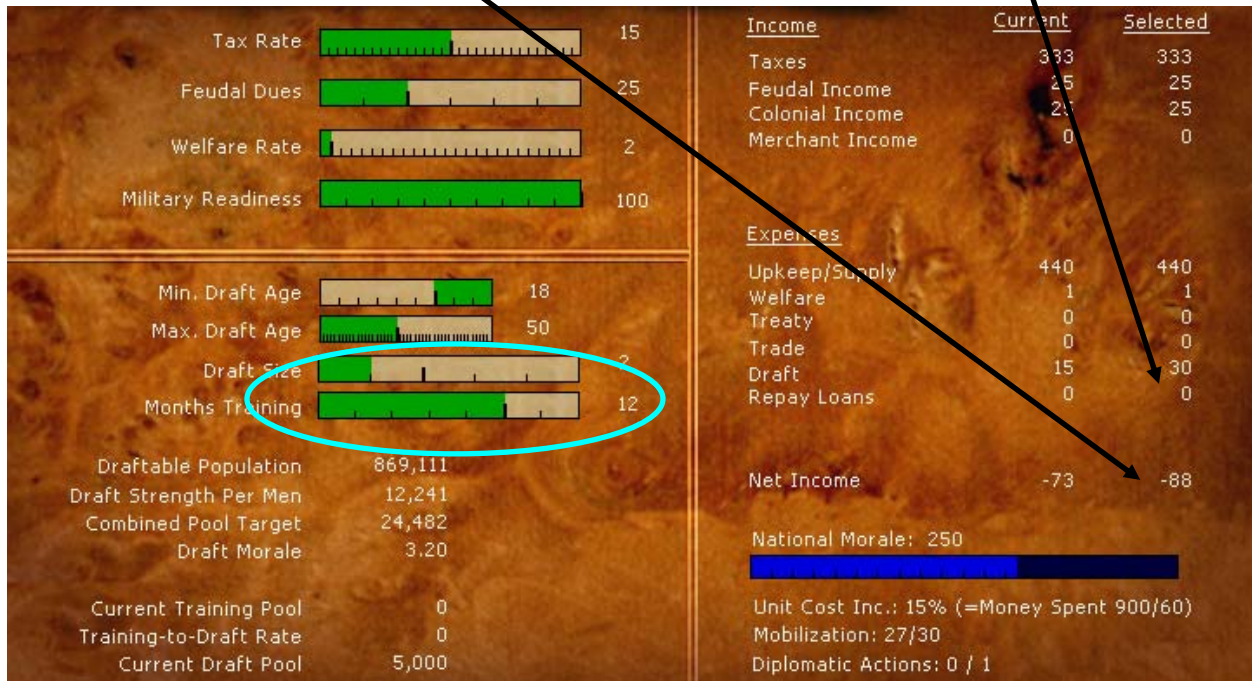
Before you do anything else do Step 3.

Step 3 – Set your desired draft rate to see the impact on cash receipts.

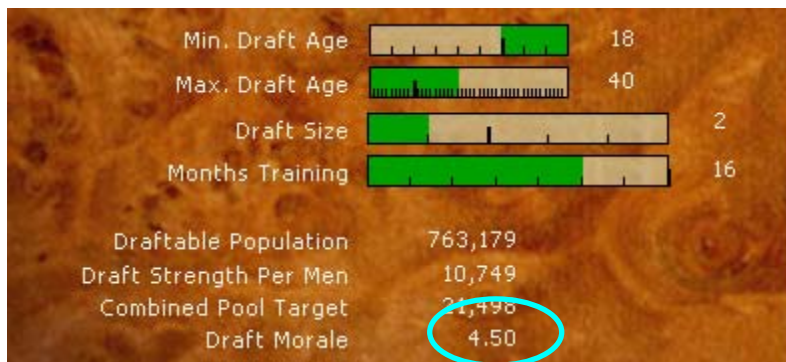
It is good to know how much you need before you decide how you're going to get it. So, set your draft rate now. Each notch on the draft rate will increase the cash you must spend each month, so it's best to set it, before you start looking for cash.

I'm a fairly cautious player, so I'm going to need just a few replacements for my military adventures until I've built up a larger army. I'm going to show two important aspects of the draft policy. The first is the effect of conscripting more of my men to the training centers. Below, you can see that I pushed the slider on the Draft Size to 2. That's a pretty good increase of new troops and should be enough to meet my needs.

Notice that this small adjustment is going to cost me another 15 Money each month. I now need 88 additional Money just to break even each month.



The second part of the draft policy, the quality level of the troops I conscript, is equally as important. I adjust the maximum age to 40; months of training to 16. Notice the level went from 3.20 to 4.50. That little change will help the



troop quality of my replacements quite a bit. Notice that the back bars indicate where the changes will adjust to after a few months. The draft age will go down a bit every month. The draft size and months of training will go up a little each month.

So, we now know that we've got to generate another 88 Money each month above what we're generating now. Let's see what we can do to make that happen. Let's move on to Step 4.

Step 4: Set your tax rate.

To the left on that screen, you'll see the sliders for the Tax Rate, the Feudal Levy, Welfare Rate, and Military Readiness. Each of these sliders has an effect on the **net amount** of money you receive each month. For now, we'll just play around with two of them: the tax rate and military readiness.



The Tax Rate Slider is the first place I'm going to go. I push it to the right from 15 to 23 to see the results on the bottom line. Notice that the black mark is on 20, but the green part of the slider is still on 15. That means that it will take several months for the taxes to come rolling in at the new level. *The change in the tax revenue is only projected at this point.*

So, what is likely the effect of all these changes? According to the advisor it looks like we met our goal. *After a few months* we'll be pulling in as much as 100 net cash per month. Keep in mind that this is only an estimate. You'll seldom get exactly what it says. There are just too many other things going on that increase or decrease what you might get. With 900 in the bank, a temporary shortfall of 73 that will soon become about 100 additional each month, you should have enough, at least for a while.

What if that still wasn't enough? What if all of our actions up to now still didn't get us to 100, or whatever amount we need?

Let's move on to Step 5 and find out what we can do to get more money each month.

Step 5 – What you can do if you're still short of cash.

Well, to start with we can reduce the draft size, we can raise the tax rate some more, or we can reduce the military readiness of our troops. This reduces the size of the units, but makes them cheaper to maintain.

<u>Income</u>	<u>Current</u>	<u>Selected</u>
Taxes	333	521
Feudal Income	25	25
Colonial Income	25	25
Merchant Income	0	0
<u>Expenses</u>		
Upkeep/Supply	440	440
Welfare	1	1
Treaty	0	0
Trade	0	0
Draft	15	30
Repay Loans	0	0
Net Income	-73	100

Here's what happened when I reduced military readiness in the prior example to 90, or 90%. Notice that it generated another 32 net cash for me. If I had slid it further to the left, the amounts I'd receive are much better. So what's the downside? My units are going to be 90% strength until I raise readiness, and when I do, they'll be filled with conscripts, possibly lowering their quality some. However, since few of my units start at full strength, this is a good option.

<u>Income</u>	<u>Current</u>	<u>Selected</u>
Taxes	333	521
Feudal Income	25	25
Colonial Income	25	25
Merchant Income	0	0
<u>Expenses</u>		
Upkeep/Supply	440	408
Welfare	1	1
Treaty	0	0
Trade	0	0
Draft	15	30
Repay Loans	0	0
Net Income	-73	132

Another way to save a little money is to post some of your troops in cities.

Their upkeep costs are a little lower when in garrison. If you don't need them in the field, get them into a city. When you're really strapped for cash, this is one way to save a little money.

Now with all that said, keep in mind that these hints are for the first turn only. There will be other things throughout the game that you can do to change your financial condition. You'll learn about those as they arise.

Let's summarize your net cash generating options for the first turn:

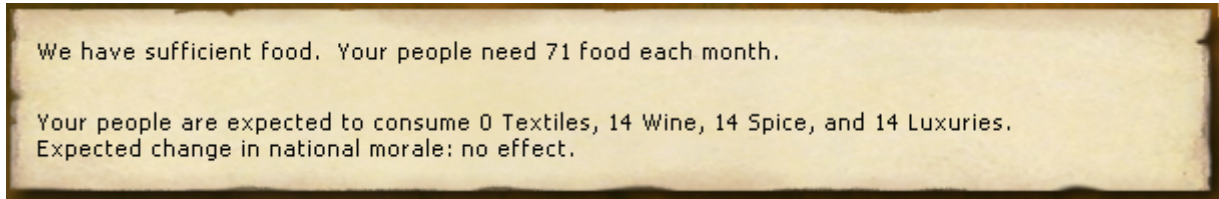
- Increase the tax rate
- Reduce readiness
- Reduce the draft size
- Quarter troops in cities

That should be all you need to do to get well into your first year as far as cash is concerned. But, a little later I'll give you some other ideas.

Raising taxes has two bad effects. It reduces your national morale, and it makes generating resources less efficient. If your national morale drops too much, or your production lags behind, you may need to cut taxes a little and find Money some other way.

Step 6 – Set initial production work orders.

Open the **Development Advisor Screen**. You'll see something like this at the bottom:



This scroll tells you a lot. It tells you how much food you need every turn, everything else remaining the same. And, it would tell you how many population points, or “men,” you would likely grow this turn.

This scroll also gives you some of your needed production goals. There are some things that your people want to consume to maintain their happiness, which affects the National Morale. Failure to meet these consistently will cause your National Morale to drop. It's usually pretty easy to meet this demand to at least a minimum degree, and once you do, just keep your eye on them. The demand goes up as your population increases and you'll have to make some adjustments now and then to compensate. This is very important, because if your National Morale is 1000, you can see a 10% increase in your overall production. That's worth keeping ma and pa at home happy.

Look to the upper right of this screen. You'll see all the resources and how much of each you're likely to get with the current slider allocation. We've already dealt with cash at the national level, so we need to do nothing with each province. So what does this part of the screen tell us?


First, it shows us what all of the provinces together might produce if you do nothing. These are in the grey boxes in the middle.

Next, it shows us what resources we already have. These should match what you see at the bottom of the main screen with the map of Europe on it.


Finally, it shows what this province is likely to produce. These are the smaller quantities above the grey boxes. Now, let's compare your goals to what you're actually producing.






Keep in mind that what's really important is what you're producing at the national level. Individual provinces only contribute to a national pool from which all expenditures actually take place. That said, let's look more closely.




 You need 71 Food according to the scroll. If you do nothing, you'll produce about 129 with all your provinces. You should have plenty, if you do nothing.




But, you have lots of other needs. Let's look at some of them.

 You need Labor. All developments and units cost labor to produce. Twenty-seven more labor points per turn is almost enough, but having at least 30 coming in each turn would be much better. This province is providing 4 of the 27.

  You need more Iron and Wood. You have 30 Iron and 100 Wood, and all of your provinces together are going to produce only a small amount this month, 6 Iron and 7 Wood. That's not enough. You'll need these for ships, artillery, guns, walls, all kinds of things.

 While you're not exactly fat in Horses, you're still producing 11 this month, so let's leave that alone until you've taken care of some other things.

   Wool, Cotton, and Textiles are all related. You're not producing enough wool nationally (-28) and you essentially have no Cotton. Textile production is low also (+10).

   Finally, you're not producing enough Wine, Spices and Luxuries. This will definitely be a goal.



So how do we meet all these needs? *This is the essence of the economic model, and it's not as hard as it might seem.* First, you need to understand some of the basics. Let's take a look at the allocation sliders. There are seven of them.

Slider Behavior

You have 100 labor points to allocate among your sliders, indicating what percent of labor you will allocate to each resource. The maximum you can assign to any one resource is 75 points, or 75%.

Any given slider only affects one, two, or three resources, and they are the same resources every time. Let's look at the relationships of each slider and what it allocates labor to produce.



Note that the Development Slider produces nothing. We'll take a look at that one a little later.

What this means is that if you manipulate the Labor slider, only Labor will be affected. If you move the Luxuries slider, only Spice and Luxuries are affected. So, if you need more Food, the Agriculture Slider may also increase Horse and Wine production above what you want, but that's the beauty of the system. The trick is to worry about the whole economy, not a single province. If one gives you more Wine than you need overall, either change it to another resource, or go to another province and make the adjustment.

The only time sliders affect different resources than they're supposed to is when you try to allocate more than 100% to all of the sliders. When you do that, the other sliders are adjusted down slightly to keep the total at 100%. But, the resource production still reflects the slider to which it is associated.

Before we take a look at how to use the sliders in particular, let's see an entire Development Advisor Screen to see if there is any other information we might find useful.



One thing should strike you right away. There are 2 labor points available that were not allocated by the AI. Never leave unallocated points in a province!

Next, some small amount has been allocated to Iron, Wood, and Luxuries, yet none of those allocations produce anything worthwhile. By shifting all of those amounts to one of those three you might get some production, but it also might be better to put the allocations somewhere else altogether.

There's also a hint that this province should be good at Wool and Iron. This hint is *usually* very useful, but there are often other things that are produced equally well, and if you need those other things more than what is suggested, you're better off ignoring this information. But, it's always a place to start.

Note that this screen also lists the population available for this province.

Before we continue, let me describe the effect the sliders have on the production of their respective goods.

Each slider has a base allocation amount. For example, the Agriculture Slider has a base amount of 30, Developments is 20, and all the others have a base of 10.

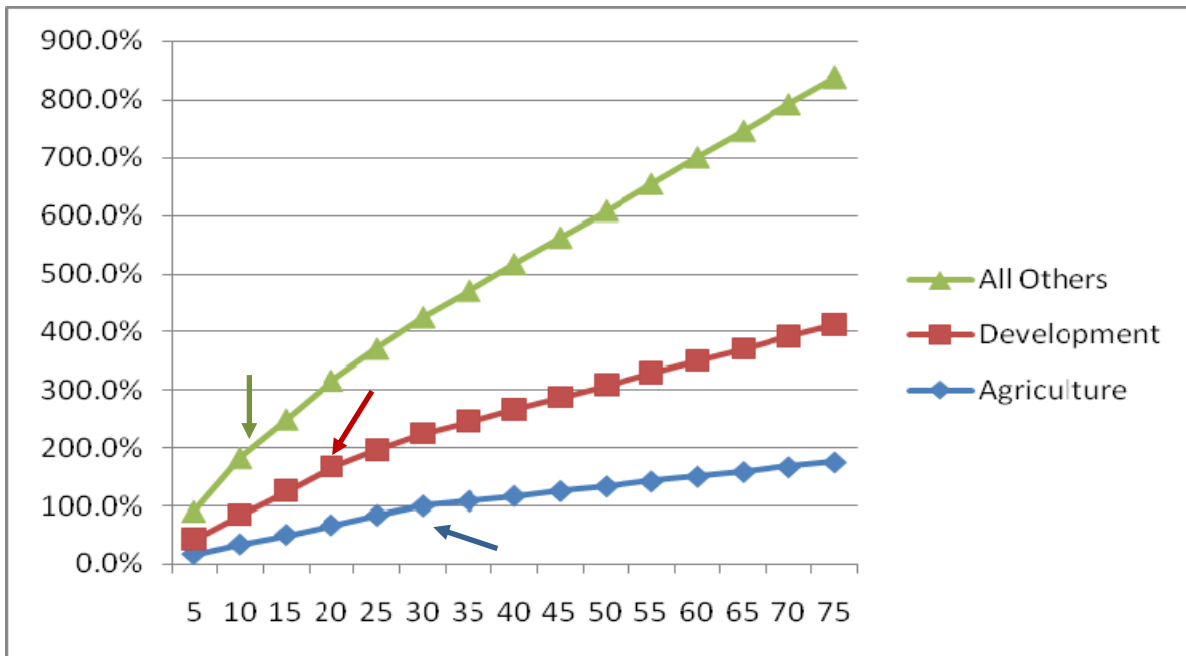
Here's an example of how the **Base Amount** works. The production numbers are large so you can see the effects of the calculations.

Base Amount = 10, or 10%. The production at that Level is 6.

Production at 5% would be $\frac{1}{2}$ the Base production, or 3.

Above the Base Amount, you only get half of the amount the Base Amount would otherwise produce. So at 20%, you'd get 6 for the first 10, but 3 for the second 10%, for a total of 9. At 30%, you'd get another 3, for a total of 12.

This means that at or below that amount, you will get production efficiently. Above that amount and production is slightly less efficient. Here's a graph to show you what the production looks like at various allocation percentages.



This graph shows that after the base amounts, shown with arrows on the graph, the changes become linear, but not as steep, i.e., as efficient. This means that *after the base amount, you do not lose any extra amount for each notch on the slider you allocate*. You should realize that, allocations at the base levels, except for food, generally will produce next to nothing, so do not be fooled into putting the base amount for several of the sliders to get “maximum” production of each of those items. The variability in the system is sometimes greater than the extra amount you would receive with that strategy, so it may not be worth it. Instead, allocate larger amounts for the sliders.

I always use 25 as a base labor allocation unit for a slider, since that is one third of the total amount a slider can have allocated to it. So, I'll have

four sliders at 25%, *or*
three at 25, 25, and 50, *or*

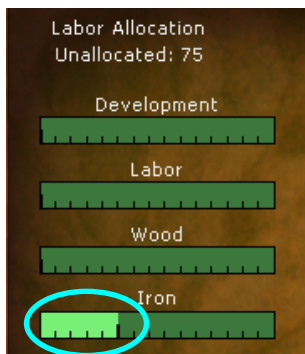
two at 75 and 25 or
two at 50, 50.

That's it. That's all I ever do. It's simple, but it works.

Allocating Labor on the Sliders

So, how do you know how much each slider produces in a given province? How many resources do you get for a given 25 points of labor allocation? Ah, that's the rub. There's only one way to know for sure. Do a little experimentation and find out. You only need to do this during the first turn, and anytime you conquer a new province, and then every three or four game years, or so, after you've built a number of developments. If you play the same nation a lot, write down what you find and refer to it every time you start a new game. You can also get the allocations set the way you like, then save the game as a starting point for the next time you play.

So, let's experiment a little. I selected this example because it clearly shows the relationships accurately.



Before I do anything else, I set all the sliders to zero. This way I can see only what the Iron slider will do when I move it. I then slide Iron to 25%. How do I know it's at 25%? Well, at the top I see that 75%



of the labor remains to be allocated. And, I'm on the fifth notch. Each notch is 5%.

I see that I now get 2 units of Iron being produced in this province. Remember, this actually goes into the national pool of Iron. This Iron, when produced, can be used to build units or developments anywhere in my territory, except, of course, protectorates.

Next, I slide it over to 50%. This province will now produce twice as much Iron. And when you move the slider to 75%, or all the way to the right, you can see that you'll produce about 6 units of Iron, or three times as much as you produce at 25%.

This works for all resources but Labor and Agriculture. Labor basically works the same, but you get +1 added in to the total. Agriculture's base is 30% so this estimate is a bit off, but not enough to change the technique.

The table to the right shows the results of our experiment.

Iron Slider	Iron Produced
25	2
50	4
75	6

Remember, above the base amount, there is still a direct relationship between where you push the slider and the amount you will likely produce. That's why my allocation schema works.

Did you notice that when I moved the Iron slider, nothing but Iron was being affected? So, if you had put 25% of the available total population labor to something else, that amount would not be changed by moving this new slider. Increasing this slider does not decrease another, unless, of course, you're trying to allocate more than the 100% available. The Economic Advisor automatically adjusts all sliders so that the total allocated is no more than 100.

Labor Allocation and Labor

Now, before we move on, let's define some terms. Each province you have has people available to do various things. They can work on farms, work in factories, build roads, cut trees, and so on. The points you have to allocate for all of your sliders represent 100% of the available effort the people in this province have to contribute to the economy. This is called Labor Allocation.

The confusion is that Labor is also used to describe the resource that is produced by the Labor slider. *What this slider does, in effect, is dedicate some Labor into a pool which can be used to purchase units or developments nationwide, and not produce resources in this province. This Labor goes into the national stockpile and is lost to the province.* So, don't get confused by the two uses of the term Labor.

The Development Slider

The Development slider has one purpose: it shortens the completion time of any development *in this province* that is currently under construction.

In the example below, notice that I have allocated none of the available province labor yet. I have begun the construction of the Roads development, and the Advisor informs me it will take almost a year. Eleven months to be exact.

Here's the screenshot:



Eleven months is too long. I need to have these roads completed much sooner than that, so I redirect the efforts of 75% of the people in that province to help with the roads and the Advisor tells me that with this amount of effort, it can be done in two months. But, if I did that, those people could not work on farms, cut trees, make textiles, or anything else. So, use this when you need something so quickly that you feel you must redirect Labor to get it.



Remember, once the road is completed, the Advisor will NOT redirect the effort onto something else – it will be wasted, so be very careful when you set this slider. Check the Events Report on the Main Screen to see when the Development is completed, and then go back to the Economic Advisor for the province to either begin another development, or to shift the labor from the development to another slider.

Now, let's get back to the experiment. By reducing all the sliders to zero, and then increasing each of them one at a time to 75%, you can see what they affect and the maximum that can be produced at this time. But remember, by setting them lower, you'll produce a proportionately smaller amount.

So, how do you cover all of your needs with your allocations? It's not obvious, because you have to set at least two sliders in each province, and then hope that all of the allocations for all of these provinces add up to what you'll need.

The First Turn Production Plan

Let's take a look at the Economic Screen once more. According to this screen we need the following each turn: 71 Food, 14 Wine, 14 Spice, 14 Luxuries.

DEVELOPMENT ADVISOR

Labor Allocation
Unallocated: 0

Development
Labor
Wood
Iron
Textiles
Agriculture
Luxuries

Military Production
<none>
Choose Production:
Reinforce To:
<none>

Developments
<none>
Guns Walls Roads Barracks Banks
Culture Farms Factories Courts Docks

Production

+64	+4	+0	+26	+2	+2
+383	+27	+11	+129	+6	+7
900	30	20	30	30	100

Best Resource: Iron
Population: 15 (Max.: 18)
Province Development Expert
Military Production Expert

London Anglia
Total # of Cities: 12

We have sufficient food. Your people need 71 food each month.
Your people are expected to consume 0 Textiles, 14 Wine, 14 Spice, and 14 Luxuries.
Expected change in national morale: no effect.

Culture Report
OK

We'll also need Labor, Horses, Iron, Wood, Wool, and Textiles. The amounts depend on what you intend to buy. The best way to get an idea what you'll need in order to build the units you want is to push the "Choose Production:" button. This opens a list of all the units that can be produced in this province, plus their costs. If you look carefully at this screen, you can get an idea of what you need to produce to be able to begin production of the unit you want.

Let's look at an example. Suppose you want to buy a 1st-/2nd rate ship. According to the chart below, you'll need 143 Money, 60 Labor, 115 Iron, 69 Wood, and 23 Textiles. Yes, you start with a small amount of each, but clearly you'll need more as the game progresses. Generally, you'll want to produce at least 20 of everything to get started, with around 30 Labor, 150% of the food requirement (90). Remember, we've already dealt with money at the national level. These figures are just a place to start. As the game progresses, you'll need to modify here and there to cover shortages and to stockpile to buy a more expensive unit when you need to.

	Money 900	Horses 20	Labor 30	Men 38	Iron 30	Timber 100	Textiles 40
Militia			20	2			
Infantry	57	23	20	2	23		
Guard	575	23	40	1	46		1/8
Cavalry	230	92	20	1	11		
Hv.Cavalry	230	138	20	1	46		46
Lt.Cavalry	230	92	20	1	11		69
Irr.Cavalry	57	161	10	1			
Artillery	230	23	40	1	115	11	
Horse Art.	230	92	60	1	115	11	57
Army	57	23	20				23
Corps	115	46	20				34
Fleet	57		20		23	115	24
Ship 1st/2nd-Rate	143		60	2	115	69	23
Ship 3rd-Rate	57		60	2	57	34	11
Ship 4th-Rate	57		40	1	23	23	11
Frigate	57		30	1	23	28	11
Privateer	57		1	1	23	172	
Merchant	86		30	1	11		115
Diplomats	345						115

So, how do you move all the sliders for an entire nation to get to those levels? It's actually pretty easy.

First, you could determine what is the maximum of each resource you can produce with the slider for that resource at the maximum. Do that for every slider and every province, writing down the maximum that can be produced.

What do you find when you do the above experiment on Belfast in Northern Ireland? Look at the table below.

Notice that Belfast can produce a maximum of about 2 Spices and 17 Luxuries each turn, *with the slider set to the maximum*. That means you would have allocated 75% of your available people to produce spices and luxuries. What do you do with the remaining 25%? Well, no matter what slider you put it on, you'll only get 1/3 of the amount listed on the chart. So, if you put it on

Textiles, you'll get 6 Textiles, and maybe 1 Wool. If you put it on Iron, you'll get 1 or 2 Iron.

Slider	Resource	Amount at Maximum (75%)
Labor	Labor	5
Timber	Wood	10
Iron	Iron	5
Textiles	Wool	2
	Cotton	0
	Textiles	6
Agriculture	Horses	4
	Food	8
	Wine	1
Luxuries	Spice	2
	Luxuries	17

It's important to understand that fractional amounts of resources are not retained after the turn. Instead, they are converted to a decimal that is used as a probability of getting an extra unit of the resource. So, if a slider calculates to 3.5 of something. You might get 3, or you might get 4. Since the decimal amount is .5, you'd have a 50/50 chance to get 4. If it was .25, you'd get a 25% chance to get a 4.

What happens if you set two sliders at 50/50? You would get 2/3 of each of the values. So 50% Textiles would give you 1 Wool and 4 Textiles. 50% Timber would give you 6 or 7 Wood.

Now you can go through each province in your country and set each slider to the maximum, writing down the values ... or, you can simply refer to the *Province Production List*, where the work has already been done for you. The table below shows the data for Britain, for the *1805 Standard Scenario*.

City	Province	Pop	Max	Labor	Wood	Iron	Wool	Cotton	Textiles	Horses	Food	Wine	Spies	Luxuries
Aberdeen	Highlands	2	2.5	1	5	2	10	0	1	2	6	4	2	2
Belfast	N.Ireland	4	5.5	5	10	5	2	0	6	4	8	1	2	17
Birmingham	Midlands	6	7.5	10	2	6	10	0	11	1	19	2	2	6
Cardiff	Wales	4	6	4	11	5	11	0	5	4	19	1	2	2
Dublin	S.Ireland	7	8	7	5	2	5	0	9	1	17	1	5	10
Edinburgh	Scotland	6	8	7	2	5	17	0	9	1	26	1	5	2
Gibraltar	Gibraltar	3	3.5	1	4	2	2	0	2	0	6	3	8	2
Liverpool	York	12	15	26	2	7	9	0	27	1	30	1	2	7
London	Anglia	16	19	17	14	10	2	0	21	1	35	2	9	2
Malta	Malta	3	3	1	2	2	4	0	2	1	6	1	4	2
Plymouth	Devon	5	6.5	3	2	4	4	0	4	4	10	1	2	9
Portsmouth	Hampshire	5	6.5	4	2	2	4	0	5	3	9	3	2	9

Notice that this table includes the current population, the maximum population (I'll explain that later), and each of the resources grouped by slider. The numbers under each of the resources is the amount that is produced when the slider is at the maximum, or at 75, or 75%

By looking at the columns, and knowing what you need at the national level, all you have to do is figure out where you get the best return for your slider allocations. Clearly, you should have enough of most everything you need, if you place the sliders with some skill.

Here is one solution to the puzzle.

City	Province	Pop	Max	Labor	Wood	Iron	Wool	Cotton	Textiles	Horses	Food	Wine	Spies	Luxuries
Aberdeen	Highlands	2	2.5	1	5	2	10	0	1	2	6	4	2	2
Belfast	N.Ireland	4	5.5	5	10	5	2	0	6	4	8	1	2	17
Birmingham	Midlands	6	7.5	10	2	6	10	0	11	1	19	2	2	6
Cardiff	Wales	4	6	4	11	5	11	0	5	4	19	1	2	2
Dublin	S.Ireland	7	8	7	5	2	5	0	9	1	17	1	5	10
Edinburgh	Scotland	6	8	7	2	5	17	0	9	1	26	1	5	2
Gibraltar	Gibraltar	3	3.5	1	4	2	2	0	2	0	6	3	8	2
Liverpool	York	12	14.5	26	2	7	9	0	27	1	30	1	2	7
London	Anglia	16	18.5	17	14	10	2	0	21	1	35	2	9	2
Malta	Malta	3	3	1	2	2	4	0	2	1	6	1	4	2
Plymouth	Devon	5	6.5	3	2	4	4	0	4	4	10	1	2	9
Portsmouth	Hampshire	5	6.5	4	2	2	4	0	5	3	9	3	2	9

	75% Allocation
	50% Allocation
	25% Allocation

Notice that those provinces generally good at producing Labor get some allocation. Those high in Wine get some agricultural effort. Those high in Wood and Iron also get some effort allocated to them. But, look at London. It's high in Labor, but the allocation went elsewhere. Why? There is enough Labor already allocated for all the provinces to get what we need, so we opted to get some other things that we need even more.

Notice that Malta and Gibraltar don't produce much of anything. These are two prime candidates for "push developing" resources. It might be wise to take 25% from Luxuries in Gibraltar (you're making, plenty at this point) and put it on development, then start a new Road level. Why a Road level? Look at the Max value in the last table. It shows that you have 3.5. (That's three for the undeveloped province, plus 1/2 for the current Road level of 1. With another 1/2 for another Road, you can grow to 4.) So, with one more level, you'd have another potential population point.

Overall, however, you haven't met all your needs. You're still short of Wool and Textiles, and your production of Iron and Wood are pretty minimal. What you might do is try to do with a little less Food and put more on Textiles in Aberdeen. Watch your Food carefully if you do this. Or, you can trade for those resources as you are not strapped for cash.



This allocation plan should get you well into the first year, and perhaps through as many as two years. Sure, you'd have to check every time something major happened to affect your economy, but certainly not every month or two. Just watch the totals to see that you're not running out of anything, and you should be fine.

Things that can help or hurt your economy.

The Enemy

One or more enemy units in your territory bring all production to a halt.

Change of Province Ownership

When you get a province as a result of a surrender clause in a treaty, you can exploit its resources. But, when you give one up, you lose all resource rights to it.

Similarly, when you capture another country's protectorate provinces, they become yours to exploit. But, you do not have the ability to manage the economy of one of your protectorates. You get a little cash from them, but that's it. So, form protectorates with care, perhaps only to reduce waste.

Inclement Weather

Bad weather costs you 50% production. So, watch your production a little more closely from December to February.

Waste

The amounts you see on the Economic Screen should be considered as what you get in a perfect world. They are maximums. If you have more than 30

provinces with level 1 through level 4 courts, then you will lose about 3% of your national production, *per province in excess of 30* that you have. Protectorates do not count for waste. Take a look this table.

Number of provinces	37
Number of provinces with Level five Courts	3
Number of Provinces contributing to waste	34
Waste (34 – 30 = 4 x 2%)	8%

This country has 37 provinces, excluding protectorates. Three of them have Level 5 Courts. This means that they have 34 provinces with Level 1, 2, 3, or 4 Courts. Since 30 provinces are allowed before any waste takes effect, this country actually has 4 over the limit. So, 4 x 2% is 8%. That is the overall level of waste you will experience.

Now how does this apply? Well, this is the approximate amount of your total production that you’ll lose to waste. If you’re producing 300 food, about 24 will disappear due to inefficiency. When waste gets very high, say 24%, it can cripple your war and development efforts.

The solution to waste is simple: *Develop your court system.* See the comments under *Developments* below.

Developments

Developments are a very important way to develop an economy and should be a significant part of any good economic strategy. Start building one or more developments immediately and as soon as you can afford it, have something being built in every province you can. Also, form protectorates, if you can.

France and England can usually meet this requirement by the fifth or six month. Economic basket cases like Russia and Turkey can usually get to that point in eighteen months to two years. But, it’s essential to grow the economy.

If you have a large country that already has a high level of Waste – Russia comes to mind – make sure you start building Courts immediately. You need to reduce Waste, or you will be forever struggling economically. There’s a trick to doing this. You will want to speed the development of Courts as much as possible. So, select those provinces that don’t provide much of anything else, and put at least 50% of your labor allocation in each of those provinces into Development on the turn you start developing courts. Every time a Court level finishes, start the next level. After a couple of years, you should be at level 5 and then you can shift your Court building activities to another province. As Russia, I usually have about 5 provinces at a time “push developing” courts in this manner.

The table below shows the resources that a given development will impact.

Development	Development Advisor Slider Bar	Resource(s) Produced
Banks, + 10% per level	None	Money
Increase Roads, +1 pop. for every two levels	Development	None
Factories, +50% per level	Labor	Labor (for the pool)
Factories, +10% per level	Iron	Iron
	Luxuries	Luxuries
Farms, +10% per level	Timber	Wood
	Textiles	Wool (and Textiles)
	Agriculture	Horses, Food, Wine
	Luxuries	Spice

Roads will also speed development time. But, the time it takes to build the Roads before you start the Courts can actually delay their completion. If you are not experiencing waste, think about developing Roads first. Otherwise, start with Courts.

Also remember that Roads increases the population potential of the province. If you're growing in population, too much Road development can cost you dearly in food. Those extra mouths eat more Food per "man" than the threshold, or "default" population. You may find that you'll run out of Food before you make much progress with your Courts. Be careful.

Obviously, if your province is good at producing agricultural goods, put effort there. If it's good at Iron, build Factories. Factories can also help with Labor and Luxuries, but only build a Factory in your "power" provinces for at least three or four years. A "Power" province is one which produces at a very high level at the beginning of the game.

If you're in a cash-poor country, consider starting development of Banks very early on. Again, start with a Cash "power" province. This is because 10% of 45 is a lot more than 10% of 12.

In almost every case, I don't develop too many things beyond level 5 or 6. They get very expensive and time-consuming, so I shift my development efforts to those provinces that are languishing. Besides, the game will likely end before you get to the point that you want to develop up to the higher levels.

Guns and Walls are only important to develop in those provinces that critical to your war and economic effort. So, build them in your capital, other "power"

provinces, and along known enemy avenues of advance. Once your economy is coming along, I usually build Guns and Walls in those provinces that are at level 5 and 6 of everything else. Some provinces I just don't worry about.

Culture is important, but unless you are a well-developed country to begin with, do not try to develop it too quickly. If playing a culture-poor country, I only have a province or two developing Culture, because I usually need the Textile costs for something else, like Courts or troops. But, once you have enough courts and troops, build Culture.

National Morale

Your National Morale has an impact on your economy, as well. Happy people do more work. At a National Morale of 1000, this will mean a 10% increase in production. At -500, it means a 5% reduction. So, get your National Morale up. One way to do this is to make sure that you are providing sufficient sumptuous, or "happy," goods – Wine, Spices, and Luxuries.

The population's demand for "happy" goods goes up with the level of population. A population of 80 will want to consume 16 of each "happy" good. When population gets to 100, they will want 20 of each good. Each time you meet that level for any good, you get credit for it. There is a chart in the Appendix for the Manual (p. 7) that lists the impact of these "credits" on National Morale. Try to get at least three "credits" each turn.

Another way to improve National Morale is to build Culture. This is a very minor effect and will not be noticeable unless you already have a large amount of culture at the beginning of the game.

Once your National Morale is satisfactorily high, cut back a little on Luxuries, if you can. There's no sense producing something that can have no benefit. If you're at 1,000, for example, another 10 NM points won't help.

Tax Rate

Increasing the tax rate increases your cash income, but it also can reduce your production of everything else. At a tax rate of 15%, your production is not affected. But for every 1% above that, you lose 1% of your production of resources.

So, at 20%, your overall production is reduced by 5%. At a 30% tax rate, you're losing 15% of your production.

And don't forget, high tax rates also lower national morale, which lowers production if it gets too low. Obviously, keep your tax rate as low as possible to maximize production.

Merchants and Privateers

Merchants and Privateers are also part of the economic system. Merchants bring in money when placed in a good location; privateers can steal other countries' goods as they flow through the sea zones in which your privateers operate. Due to the probability of being successful with either of these units, you should not rely on them to keep your economy afloat. Treat them as the gravy to your otherwise excellent chicken fried steak.

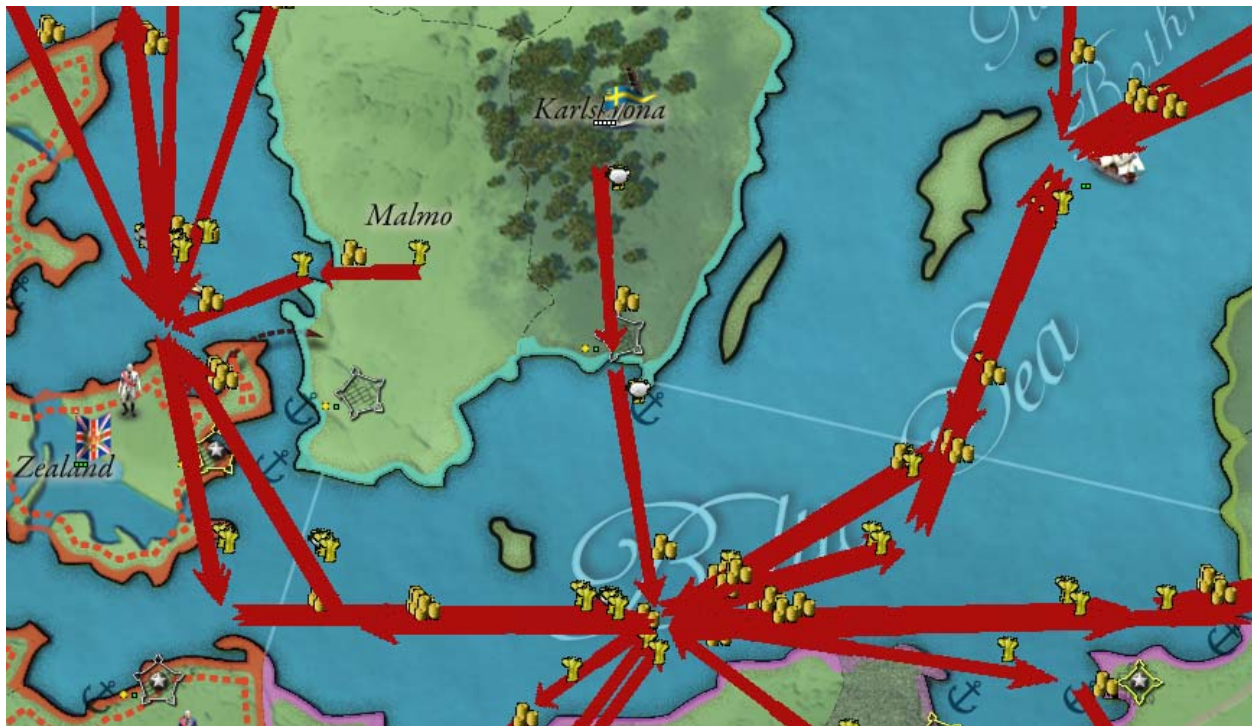
Merchants are the most important as they typically will bring in far more cash than privateers can steal. However, privateers can bring in very essential items in small quantities. How do you place them? Click on one and look at several nearby sea zones. You'll see an estimated amount of Money that you could receive. Look at the screenshot below. By moving the merchant to the channel, you could receive 32 Money. Move it another zone and you see 38. Either one is a good place.



Now, keep in mind that if another merchant moves in, even one of yours, that amount will drop. It will also drop if a privateer is present. So, you must constantly check your merchants to see if there are better places to be. The problem is that other countries may also plan to move a merchant into the zone that you will not know about, so it's seldom likely that you'll get all you think you will. Also, Dock development of 7 or more will increase merchant income. But, the amount you spend to get up to that level is seldom ever seen

in return, unless you play very long games, or you're fortunate to have good dock development in a few provinces to begin with.

Privateers can also add small amount of money and goods. They steal it from trade passing through the sea zone. Where do you place them? Look for zones that have a lot of trade passing through them. Look at the screenshot below.



What you see is three sea zones rife with trade. Move in a privateer and feast a little. You won't get a lot, but you get a slow trickle of goods that you might really need, and can always use a few extra dollars if they steal some of those. Find those trade routes that have those goods passing through that you really are short of. That should be your priority of Privateer placement.

The Population

The number of Men in a province is directly related to the amount of Labor and Textiles produced. By building Road developments, you can increase the population potential of each province so that you can grow your population above the "threshold" total by having excess food. This is described in the manual.

But, there is a big downside. Additional Men also consume additional food at an ever increasing rate. And, your total population is directly related how much Wine, Spice, and Luxuries you consume. So, if you're building roads, watch the levels of these goods carefully. When you accumulate more than 100

textiles, you're also at risk to have some consumed by the population. The larger the population, the more Textiles that will be consumed.

Final Comments

That's it. I hope you find this helpful. I learned the economy by playing a game for a few game months, seeing what I was running out of, reading the manual, and starting a new game. I did this many times. After a while, you'll master it. Trust me.