Concours interne de recrutement d'administrateurs de l'Insee

Épreuve orale d'admission de mathématiques-statistiques

Chaque sujet est composé de **deux** exercices.

Le candidat doit les traiter **tous les deux** puis disposera de 35 minutes environ pour en présenter les résultats.

Les 10 dernières minutes seront consacrées à des questions portant a priori sur des thèmes autres que ceux déjà abordés.

Exercice 1

Soit f une fonction continue définie sur $\mathbb{R}^+$.

1. On suppose l'intégrale $\int_0^{+\infty} f(t)\,dt$ **convergente**.
   a) Montrer que : $\frac{1}{x}\int_0^x t\,f(t)\,dt \to_{x\to+\infty} 0$.
   b) Montrer que, pour tout $a \geq 0$, l'intégrale $\int_0^{+\infty} e^{-at} f(t)\,dt$ est convergente.
   c) Montrer que : $\lim_{a\to 0^+} \int_0^{+\infty} e^{-at} f(t)\,dt = \int_0^{+\infty} f(t)\,dt$.

2. On suppose maintenant que : $\boxed{t\,f(t) \to_{t\to+\infty} 0.}$
   a) Montrer que : $\frac{1}{x}\int_0^x t\,f(t)\,dt \to_{x\to+\infty} 0$,
   b) En déduire que, pour tout $a > 0$, l'intégrale $\int_0^{+\infty} e^{-at} f(t)\,dt$ est convergente.
   c) Montrer que : $\int_0^A f(t)\,dt - \int_0^{+\infty} e^{-\frac{t}{A}} f(t)\,dt \to_{A\to+\infty} 0$.

      On pourra décomposer l'intégrale $\int_0^{+\infty} e^{-\frac{t}{A}} f(t)\,dt$ *en la coupant au point A.*
   d) En déduire que l'intégrale $\int_0^{+\infty} f(t)\,dt$ est convergente si et seulement $\int_0^{+\infty} e^{-at} f(t)\,dt$ admet une limite finie quand $a \to 0$.

Exercice 2

On considère une suite $(X_n)_{n\geqslant 1}$ de variables aléatoires indépendantes à densité et de même loi, définies sur un espace probabilisé $(\Omega, \mathcal{A}, \mathbb{P})$.
On note f une densité de ces variables, F leur fonction de répartition et on suppose que f est de classe C^1 sur $\mathbb{R}$ et strictement positive.
Dans tout l'exercice, n désigne un entier supérieur ou égal à 1.
Pour tout réel t, on considère :

- La variable aléatoire U_k définie pour tout entier naturel k non nul par : $U_k(t) = \mathbf{1}_{[X_k \leqslant t]}$.
- Le réel $p_n(t)$ défini par : $p_n(t) = F\left(t + \dfrac{1}{\sqrt{n}}\right) - F\left(t - \dfrac{1}{\sqrt{n}}\right)$.
- Les variables aléatoires $\overline{U}_n$ et T_n définies par :

$$\overline{U}_n(t) = \frac{1}{n}\sum_{k=1}^{n} U_k(t) \text{ et } T_n(t) = \frac{\sqrt{n}}{2}\left(\overline{U}_n\left(t + \frac{1}{\sqrt{n}}\right) - \overline{U}_n\left(t - \frac{1}{\sqrt{n}}\right)\right)$$

1. Montrer que la suite $\left(\sqrt{n}(\overline{U}_n(t) - F(t))\right)$ converge en loi et préciser la loi limite.
2. (a) Déterminer $\lim\limits_{n\to+\infty} \mathbb{E}(T_n(t))$ et $\lim\limits_{n\to+\infty} \sqrt{n}\mathrm{Var}(T_n(t))$.
   (b) Montrer que $(T_n(t))$ converge en probabilité vers $f(t)$.
3. *On admet les deux résultats suivants :*

   - *La suite $n^{1/4}\left(T_n(t) - \mathbb{E}(f_n(t))\right)$ converge en loi vers $\mathcal{N}\left(0, \dfrac{f(t)}{2}\right)$.*
   - *Soit (A_n) une suite de variables aléatoires qui converge en loi vers une variable aléatoire A et une suite C_n de variables aléatoires convergeant en probabilité vers une variable aléatoire certaine C.*
     Alors la suite $(A_n + C_n)$ converge en loi vers la variable aléatoire $A + C$.

   On pose :

$$u_n = n^{1/4}(\mathbb{E}(T_n(t)) - f(t))$$

   (a) Montrer que la suite (u_n) converge en probabilité vers 0.
   (b) Déduire de ce qui précède que la suite $n^{1/4}\left(T_n(t) - f(t)\right)$ converge en loi et préciser la loi limite.

Exercice 1

Soit E un espace euclidien de dimension n, où n est un entier supérieur ou égal à 1. On note $\langle\ ,\ \rangle$ le produit scalaire.
Pour $p \in [\![2, +\infty[\![$, On dit que la famille de vecteurs $(u_1, u_2, \dots u_p)$ est obtusangle si :

$$\forall (i,j) \in [\![1,p]\!]^2,\ i \neq j, \quad \langle u_i, u_j \rangle < 0.$$

On suppose dans la suite que la famille $(u_1, u_2, \dots u_p)$ est obtusangle.

1. On pose $F = \big(\mathrm{Vect}(u_p)\big)^{\perp}$ et pour tout i appartenant à $[\![1, p-1]\!]$, on note v_i la projection orthogonale de u_i sur F.
   (a) Pour tout i appartenant à $[\![1, p-1]\!]$, justifiez l'existence d'un réel a_i tel que :
   $$u_i = v_i + a_i u_p.$$
   (b) Exprimer $\langle v_i, v_j \rangle$ en fonction de $\langle u_i, u_j \rangle$, a_i, a_j et $\|u_p\|$.
   (c) Calculer $\langle u_i, u_p \rangle$ et en déduire que la famille $(v_1, v_2, \dots v_{p-1})$ est obtusangle.
2. Montrer, par récurrence sur n, qu'une famille obtusangle possède au plus $n+1$ vecteurs.

Exercice 2

On considère deux suites de variables aléatoires :

- (X_i), indépendantes et de même loi, d'espérance *m* et de variance $\sigma^2 > 0$
- et (Z_i), indépendantes et de même loi $B(1, \mu)$ *avec* $\mu \in]0, 1[$.

Les X_i et les Z_j sont mutuellement indépendantes.

1. Calculer les moments de $X_1 Z_1$ et $(X_1 - m) Z_1$.

2.
   a) On considère le modèle de régression simple $X_i = a Z_i + U_i$.
   Déterminer l'estimateur des moindres carrés ordinaires de *a* quand on dispose d'observations pour $i = 1, \ldots, N$ et étudier sa convergence en probabilité quand $N \to +\infty$.

   b) Même question pour le modèle $Z_i = b X_i + V_i$ et le paramètre b.

   c) Que pensez-vous de ces modèles ?

3. Établir la convergence en loi de $\sqrt{N}\left(\dfrac{\sum_{i=1}^{N} X_i Z_i}{\sum_{i=1}^{n} Z_i} - m\right)$ pour $N \to +\infty$.

   On rappelle le résultat suivant :

$$Y_n \to N(\theta, \tau^2)\ (\textit{convergence en loi}),$$
$$A_n \to A \textit{ et } B_n \to B\ (\textit{constantes, convergence en probabilité})$$
$$\Rightarrow$$
$$A_n Y_n + B_n \to N(A\theta + B, A^2 \tau^2)\ (\textit{en loi}).$$

4.
   a) Établir la convergence en loi de $\sqrt{N}\left(\dfrac{\sum_{i=1}^{N} X_i Z_i}{\sum_{i=1}^{N} Z_i} - \dfrac{\sum_{i=1}^{N} X_i (1 - Z_i)}{\sum_{i=1}^{N} (1 - Z_i)}\right)$ pour $N \to +\infty$.

   b) En admettant qu'on puisse approximer la loi vraie par la loi limite pour *N* assez grand et en supposant μ **connu**, donner un estimateur asymptotiquement sans biais de σ^2. Interpréter la méthode.

5. Exprimer la loi de $\dfrac{X_1 Z_1}{\sum_{i=1}^{N} Z_i}$ au moyen de la fonction de répartition F des X_i.

Exercice 1

1. Soit $A \in M_{p,q}(\mathbb{R})$. On note ${}^tA$ sa transposée.

   a) Montrer que : $Ker\,({}^tA\ A) = Ker\ A$.
   b) Comparer $Rg\,({}^tA\ A)$ et $Rg\ A$.
   c) Si ${}^tA\ A$ est inversible, quelle relation en résulte-t-il entre *p* et *q* ?
   d) Montrer que les valeurs propres de ${}^tA\ A$ sont réelles positives ou nulles.

2. On suppose maintenant $p = q$.

   a) On considère l'application $\phi : (A, B) \in M_p(\mathbb{R}) \rightarrow \phi(A, B) = Tr\,({}^tA\ B)$.
   (*Tr* est la trace).
   Montrer que cette application définit un produit scalaire sur $M_p(\mathbb{R})$.

   b) Montrer que : $\forall\ (A, B) \in M_p(\mathbb{R})^2 : [Tr\,({}^tA\ B)]^2 \leq Tr\,({}^tA\ A)\ Tr\,({}^tB\ B)$.

   c) En déduire que : $\forall\ A \in M_p(\mathbb{R}) : \left|Tr\,(A^2)\right| \leq Tr\,({}^tA\ A)$.

   d) Dans quel cas y a-t-il égalité dans l'inégalité précédente ?

Exercice 2

Dans tout l'exercice, α et θ désignent des réels strictement positifs et μ un réel quelconque et Γ la fonctior définie sur $\mathbb{R}_+$ par :

$$\forall x > 0, \quad \Gamma(x) = \int_0^{+\infty} t^{x-1} e^{-t} \mathrm{d}t.$$

On considère la fonction F définie par :

$$F(x) = \begin{cases} \exp\left(-\left(\dfrac{x-\mu}{\theta}\right)^{-\alpha}\right) & \text{si } x > \mu \\ \\ 0 \text{ sinon.} \end{cases}$$

On admet que F est une fonction de répartition d'une variable à densité X et on note $X \hookrightarrow \mathcal{F}(\mu, \theta, \alpha)$

1. On pose $Y = \dfrac{X-\mu}{\theta}$.
   Déterminer une densité de Y et calculer $\mathbb{E}(Y)$ en fonction de Γ et de α.
   En déduire la valeur de $\mathbb{E}(X)$ en fonction de Γ et de α.
2. Soit T une variable aléatoire de fonction de répartion :

$$H(x) = \begin{cases} 1 - \left(\dfrac{x+\theta}{\theta}\right)^{-\alpha} & \text{si } x > 0 \\ \\ 0 \text{ sinon} \end{cases} .$$

On ne demande pas de vérifier que H est effectivement une fonction de répartition.

On considère *n* variables aléatoires $T_1, T_2, \ldots, T_n$, indépendantes et de même loi que T.

On note $M_n = \max(T_1, \ldots, T_n)$ et on pose $W_n = \dfrac{M_n - b_n}{a_n}$, où $a_n = \dfrac{\theta n^{1/\alpha}}{\alpha}$ et $b_n = \theta n^{1/\alpha} - \theta$.
Montrer que (W_n) converge en loi vers une loi que l'on précisera.

Concours interne de recrutement d'administrateurs de l'Insee

Épreuve orale d'admission, sujet « économie »

Le candidat dispose de 45 minutes pour préparer l'un de ces trois sujets.

Chaque sujet comporte deux exercices à traiter.

Sujet n°1

Exercice 1 : cartel

Soit le marché d'un bien comportant n entreprises, dont la fonction de coût total est, pour chacune :

$C(y) = y^2/2$

Où y désigne la quantité produite du bien

La demande du marché pour ce bien en fonction du prix unitaire p a pour équation :

$D(p) = 10 - 7p$

Les n entreprises se répartissent en deux groupes distincts : m entreprises s'entendent pour former un cartel et les n – m autres constituent la « frange concurrentielle » qui demeure en concurrence. Le cartel décide du prix et du niveau de production des entreprises qui le forment à partir de la maximisation de la somme de leurs profits, tandis que les autres entreprises se comportent comme en concurrence et considèrent le prix p auquel elles vendent le bien comme une donnée.

1) Déterminer en fonction de p la quantité offerte et le profit π_{co} de chaque entreprise de la frange concurrentielle. Quelle est, en fonction de n et m la demande résiduelle $D_r(p)$ disponible pour les entreprises du cartel ? (2 pts)
2) Si chaque entreprise, i, du cartel produit la quantité y_i , (i = 1,…m), montrer que le cartel minimise ses coûts en faisant produire à chacune d'entre elles une quantité identique. En déduire le profit du cartel en fonction de la quantité totale produite Y. (3 pts)
3) Comment le cartel va-t-il se comporter sur le marché ? Déterminer quel prix p(m,n) il va choisir, ainsi que le profit $\pi_{ca}(m,n)$ de chacune des entreprises qui le composent. Exprimer en fonction de m et de n le profit de chaque entreprise de la frange concurrentielle. Comparer les deux profits. Comment expliquez-vous ce résultat ? (3 pts)
4) Un cartel est *stable de manière interne* si le profit réalisé par un membre du cartel est supérieur ou égal au profit qu'il obtiendrait en le quittant pour rejoindre la frange concurrentielle. Le cartel est *stable de manière externe* si le profit d'une entreprise de la frange concurrentielle est supérieur ou égal à celui qu'elle obtiendrait en adhérant au cartel. Un cartel est *stable* s'il est stable à la fois de manière interne et externe.

Exprimer ces propriétés à l'aide d'inégalités portant sur les profits précédents. (1 pt)

5) Pour n = 8, qu'en est-il dans les conditions de marché et de coût précédents des différents types de stabilité si m = 2 ? Si m = 5 ? Existe-t-il des tailles du cartel pour lequel il est stable ? (3 pts)

Exercice 2 : subvention

Un consommateur, de préférences vérifiant les propriétés habituelles et disposant d'un revenu R, consomme à l'équilibre deux biens en quantité $q_1^*>0$ et $q_2^*>0$. On suppose les prix unitaires des biens tous deux égaux à 1. L'Etat décide de lui verser une subvention en nature consistant en une quantité s_1 de bien 1, avec $s_1<q_1^*$.

1) Si le bien q_1 est un bien normal, tout se passe-t-il comme si l'Etat avait versé au consommateur un supplément de revenu monétaire d'un montant s_1. ? Faire une représentation graphique (2,5 pts)

2) Si le bien q_1 est un bien inférieur, tout se passe-t-il comme si l'Etat avait versé au consommateur un supplément de revenu monétaire d'un montant s_1. ? Faire une représentation graphique. (2,5 pts)

3) On suppose maintenant que les préférences du consommateur sont homothétiques et que, avant la subvention, il consomme à l'équilibre les quantités $q_1^* = 12$ et $q_2^* =36$. Tracez le graphe donnant la quantité de bien q_1 consommée à l'équilibre en fonction du niveau s_1 de la subvention en nature, pour un revenu initial de 48. Pour quelle valeur de s_1 ce graphe comporte-t-il un infléchissement ? (3 pts)

Sujet n°2

Exercice 1 : utilité en mesure monétaire

Soit un consommateur de fonction d'utilité u(**x**), où **x** = (x_1, ….x_n) est un vecteur de biens de consommation, et de revenu m, confronté à un vecteur de prix exogènes **p** = (p_1,…p_n). La fonction d'utilité en mesure monétaire (désignée par u.m.m. dans la suite) s'écrit :

m(**p,x**) ≡ e(**p**, u(**x**)), où e(**p**, u(**x**)) désigne la fonction de dépense du consommateur.

1) Donnez la définition de la fonction de dépense dans le cas général et expliquez comment on l'obtient. Expliquez la signification de l'identité ci-dessus, ainsi que les objectifs auxquels répond la définition de la fonction u.m.m. (1 ,5pt).

2) v(**p**,m) désigne la fonction d'utilité indirecte du consommateur. Donnez la définition de cette fonction dans le cas général. Donnez la définition de la fonction d'utilité indirecte en mesure monétaire (u.i.m.m.) notée : μ(**p**;**q**,m),désignant la fonction d'utilité indirecte correspondant à la finction d'utilité u.m.m. m(**q,x**), et où **q** désigne un autre vecteur de prix. Expliquez et faites une représentation graphique. (1,5 pt)

3) On suppose que le vecteur de biens **x** est réduit à deux biens, x_0 et x_1 de prix respectifs p_0 =1 et p_1 quelconque. Le consommateur a pour fonction d'utilité $u(x_0, x_1) = x_0 + U(x_1)$, avec U'>0 et U''<0. Il s'agit d'une fonction d'utilité quasi-linéaire.

- **a)** Calculez les demandes marshalliennes du consommateur. Montrez en particulier **que** la demande de x_1 est indépendante du revenu et que que le TMS correspondant est constant pour x_1 = cste. Tracez quelques courbes d'indifférence du consommateur. (1pt)
- **b)** Application numérique :
  $u(x_0, x_1) = x_0 + x_1^{1/2}$. (1,5 pt)
- **c)** Calculez la fonction d'utilité indirecte dans le cas général (du 3)). Montrez qu'elle peut s'écrire sous la forme : $v(p_1,m) = m + k(p_1)$. Calculez $k(p_1)$ pour l'application numérique du a). Donnez la fonction de dépense. (1,5 pt)
- **d)** Calculez la fonction u.m.m. correspondante en général, puis celle de l'application numérique. Comment peut-on interpréter ici la différence entre la fonction d'utilité de départ et cette fonction ? (1,5 pt)
- **e)** Calculez ici la fonction d'utilité indirecte u.i.m.m. correspondante, dans le cas général du 3) tout d'abord, puis pour l'application numérique. En déduire que $\mu(p_1; p_1,m) = m$ (1,5 pt)

4) Le consommateur est celui du **3)**. Supposons qu'il passe d'une situation où il a un budget m et est confronté au prix p_1, à une situation dans laquelle il obtient le budget m' et est confronté au prix p'_1 (par exemple à la suite d'une modification de la fiscalité). On

cherche à mesurer la variation correspondante de son bien-être. On utilise généralement pour cela deux mesures :
La variation équivalente : $VE = \mu(p_1; p'_1, m') - \mu(p_1; p_1, m)$

La variation compensatrice $VC = \mu(p'_1; p'_1, m') - \mu(p'_1; p_1, m)$

a) Expliquez l'adéquation de ces mesures à l'objectif recherché, ainsi que la différence éventuelle entre les deux. (1,5 pt)
b) Calculez VE et VC ici. Qu'en déduisez-vous ? Donnez une explication de ce résultat à partir de votre réponse au **3)**.(1,5 pt)

(N.B. Les questions **3) a), b)** et **c)** peuvent se traiter indépendamment des précédentes)

Exercice 2 : tarification binôme

La tarification binôme consiste à faire d'abord payer au consommateur un prix d'entrée T (le droit à acheter ultérieurement le produit), puis à facturer en plus chaque unité supplémentaire consommée.
On considère un club de tennis, dans un quartier isolé, qui doit décider quel prix faire payer pour la carte annuelle de membre et pour la location des courts de tennis

1) La première catégorie de joueurs a pour fonction de demande : $q_1 = 10 - p$ où q_1 est le nombre d'heures de location de courts par semaine et p le prix de la location horaire des courts. Il y a 1000 joueurs de ce type.
   a) Le club, dans un premier temps, décide de donner gratuitement la carte de membre et d'utiliser sa situation de monopole sur ce marché. On suppose que le coût marginal d'utilisation des courts est nul, et que le coût d'entretien des courts est de 10 000 euros par semaine. Quel prix p sera-t-il fixé pour l'heure d'utilisation d'un court. Et quel est le montant du profit hebdomadaire réalisé ? Faire une représentation graphique. (1 pt)
   b) Le bureau du club pense pouvoir accroître les profits en pratiquant une tarification binôme, c'est-à-dire en établissant, outre le prix horaire d'utilisation des courts, un montant fixe pour la carte annuelle de membre (le club est supposé fonctionner pendant les 52 semaines de l'année). En appelant T le prix de la carte, montrer que le profit hebdomadaire, qui peut s'écrire : $\pi(p) = T(p)/52 - p\,(10\,000 - 1000p)$ est maximum lorsque le prix est fixé au coût marginal et T est fixé au montant du surplus de chaque joueur. Quel sera le prix de la carte et quel est le montant du profit hebdomadaire? Le bureau avait-il raison de changer de mode de tarification ? (2 pts)
2) Une seconde catégorie de joueurs, plus occasionnels, a comme fonction de demande : $q_2 = 4 - 0{,}25p$. Il y a également 1000 joueurs de ce type.
   a) Avec la tarification du 1) b), combien de joueurs de chaque type fréquenteront-ils les courts ? (1 pt)
   b) Y a-t-il un moyen d'augmenter à la fois le nombre de joueurs et les profits, et si oui, comment ? Montrer que cela implique de modifier, et le prix T de la carte de

membre, et le prix d'utilisation des courts. Quels seront-ils alors et quel sera le montant du profit ? (3 pts)

Sujet n°3

Exercice 1

On considère un marché sur lequel la demande s'écrit :

$$P = 150 - 2q$$

Où P est l'unique prix de vente et q la quantité totale de bien demandée. Deux firmes interviennent sur ce marché. Leurs coûts totaux respectifs sont donnés par les expressions suivantes :

$$C_1(q_1) = {}^{5}$$

$$C_2(q_2) = \overline{2}q_1^2 \\ 10q_2$$

On considère que les deux firmes se font concurrence de manière symétrique, par les quantités.

1. Comment s'appelle ce type d'environnement ? (1 pt)
2. Calculer le prix de vente, et la production de chacune des firmes, en expliquant et justifiant clairement votre démarche. (5 pts)
3. Si la concurrence s'opérait par les prix, quel serait l'équilibre ? (2 pts)

Exercice 2

On considère un agent disposant d'une richesse initiale W_0, et face à l'unique choix de la répartition de sa richesse entre deux supports d'épargne, un actif sûr (de type compte courant) et un actif risqué (de type actions en bourse).
Le rendement/taux d'intérêt de l'actif sûr est noté $r \geqslant 0$ (1€ placé rapporte $1 + r$€). Le rendement de l'actif risqué peut prendre deux valeurs : soit $r_b < 0$ (avec une probabilité π), soit $r_h > r$ (avec une probabilité $1 - \pi$). On notera α la fraction de son épargne placée en actif risqué. On impose $0 \leqslant \alpha \leqslant 1$.
Pour simplifier l'analyse, on adopte une approche statique : l'agent, disposant de W_0€, effectue son choix de ventilation de l'épargne et immédiatement après, il en retire les fruits, aléatoires, pour consommer intégralement ce dont il dispose. En d'autres termes, le rendement (sûr ou risqué) est obtenu immédiatement au cours de l'unique période considérée. On note $u(W)$ l'utilité retirée de la consommation de W€. On suppose par ailleurs que les préférences de l'agent face au risque sont telles qu'elles peuvent être représentées par l'utilité espérée. qui s'écrit alors

$$E(u(\tilde{W})) = \pi u(W_b) + (1 - \pi)u(W_h)$$

avec $\tilde{W}$ la variable aléatoire représentant la richesse à l'issue de la réalisation du rendement risqué, et W_h, W_b les deux niveaux possibles de cette richesse en fonction de la réalisation du rendement de l'actif risqué (b, h).

1. Quels sont les 3 grands types d'attitude vis-à-vis du risque ? (1 pt)
2. Exprimez les deux niveaux de richesse à l'issue du placement, W_h, W_b en fonction des différents paramètres et de α. (2 pts)
3. Ecrivez le programme de l'agent choisissant α. Résolvez-le et obtenez une expression de la condition du premier ordre faisant intervenir, entre autres, le choix optimal noté α^*, les différents paramètres, la fonction d'utilité $u(W)$ et/ou sa dérivée. (3 pts)

4. On considère ici (questions 4 à 6) que la fonction d'utilité est à aversion relative au risque constante et unitaire, soit :

$$u(W) = ln(W)$$

Montrez que le choix de α^* est fourni par l'expression suivante (2 pts) :

$$\alpha^* = \frac{(E(\tilde{r}) - r)(1 + r)}{(r - r_b)(r_h - r)}$$

5. Que représente le terme $E(\tilde{r}) - r$? Expliquez pourquoi la proportion placée en actifs risqués est croissante avec ce terme. (2 pts)
6. Le choix en actif risqué α^* est indépendant de la richesse initiale W_0. Est-ce intuitif ? Ce résultat est-il général ou pas ? Expliquez. (2 pts)

Concours interne de recrutement d'administrateurs de l'Insee

Épreuve orale d'admission : anglais

Le candidat dispose de 45 minutes pour commenter un texte abordant un sujet d'ordre général, remis au préalable, et portant sur les domaines économique ou social, suivi d'une interrogation sur les idées principales du texte et d'un échange sur la carrière ou le projet professionnel du candidat.

Exemples de textes pouvant être proposés :

The New York Times https://www.nytimes.com/2021/04/13/opinion/immigration-border-wall.html

We Need a High Wall With a Big Gate on the Southern Border

Immigration is America's lifeblood, so we can't risk losing it.

April 13, 2021

By Thomas L. Friedman
Opinion Columnist

After reading as much as I can about the latest surge in illegal immigration along our southern border, I'm still not clear how much is seasonal, how much is triggered by President Biden's announcement that he was halting construction of Donald Trump's border wall and reviewing Trump's asylum policies, and how much is just the lure of jobs in a rapidly vaccinating United States.

But this latest flood of illegal immigrants and asylum-seekers — more than 170,000 apprehended in March alone, including thousands of children, mostly fleeing chaos in Central America — only reinforces my view that the right border policy is *a high wall with a big gate.*

I wish we could take in everyone suffering in the world and give each a shot at the American dream, but we can't while maintaining our own social cohesion, which is already fraying badly enough. So, making immigration policy today requires a tough-minded balance between hardheartedness and compassion.

If we just emphasize the high wall, and wear cruelty as a badge of honor, as Trump did, we lose out on the huge benefits of immigration. But if all we do is focus, as many on the left do, on the evils of a wall and ignore the principles of a big gate — that would-be immigrants and asylum-seekers need to get in line, ring our doorbell and enter legally, and those who don't should be quickly evicted — we will also lose out on the huge benefits of immigration.

Why? Because so many Americans will think that the border is open and out of control that they will elect leaders who will choke off *all immigration*, which is the lifeblood of our country. Have no doubt, a seemingly out-of-control border would be a godsend for the Trump G.O.P. — an emotional club even more evocative than the mantra "Defund the police" with which to beat Democratic candidates in the midterms.

Already, a recent ABC News/Ipsos poll found that 57 percent of Americans disapprove of Biden's handling of the border.

High wall-big gate is the right position for Biden. Only by assuring Americans that we have a high enough wall to control illegal immigration — or its equivalent in terms of border controls and repatriation measures — can we maintain a public consensus for a big gate.

Biden has to get this right, and I know it won't be easy. Because while maintaining a controlled inflow of immigrants has never been more important, the forces driving more waves of illegal migrants have rarely been more powerful.

Those forces are surging because, quite simply, it's harder to be a viable country today. The 50 years after World War II were a great time to be a weak little country. The Cold War meant that two superpowers were throwing money at you to help feed your poor, educate your kids, sustain your government and prop up your army; China was not in the World Trade Organization, so everyone could be in low-wage industries; populations were moderate; climate change was limited; and no one had a cellphone and social networks to talk back to leaders or easily organize opposition.

Today, all of that has flipped. Now no superpower wants to touch your country because all they can win is a bill. China is in the W.T.O., so it is much harder to compete in low-wage industries. Populations have exploded. Climate change is hammering small-scale farmers, so they are leaving their lands for the cities and beyond — and everyone has a smartphone to complain or find a human trafficker to be smuggled north.

OPINION DEBATE

What should the Biden administration prioritize?

- **EDWARD L. GLAESER**, an economist, writes that the president should use his infrastructure plan as an opportunity to "break the country out of its zoning straitjacket"
- **THE EDITORIAL BOARD** argues the administration should return to the Iran nuclear deal, and that "at this point, the hard-line approach defies common sense."
- **JONATHAN ALTER** writes that Biden needs to do now what F.D.R. achieved during the depression: "restore faith that the long-distrusted federal government can deliver rapid, tangible achievements."
- **GAIL COLLINS**, Opinion columnist, has a few questions about gun violence: "One is, what about the gun control bills? The other is, what's with the filibuster? Is that all the Republicans know how to do?"

The result: Many weak nations are fracturing and hemorrhaging their people, creating vast zones of disorder, from which millions of people are seeking, unsurprisingly, to migrate to zones of order — i.e., from Latin America, Africa, the Middle East and South Asia to the U.S. and Europe. And the pandemic has made things only worse. Just on Tuesday CNN reported that "at least 42 migrants have died after a boat they were traveling in from Yemen capsized off the coast of Djibouti, East Africa."

Last week the U.S. National Intelligence Council released its quadrennial "Global Trends" report. It stated right at the top: "In coming years and decades, the world will face more intense and cascading global challenges, ranging from disease to climate change to the disruptions from new technologies and financial crises. These challenges will repeatedly test the resilience and adaptability of communities, states and the international system, often exceeding the capacity of existing systems and models."

Indeed, while a lot of attention has been devoted to the number of unaccompanied children coming across our border, The Wall Street Journal reported on March 24 that the actual numbers of migrants reveal that this surge is primarily "being driven by individual adults. Most of the migrants are Mexicans, often men in search of work with the pandemic easing and the U.S. economy set to boom."

Without proper border controls and simultaneous investments in stabilizing weak countries — which Biden has smartly proposed — we and the European Union will face many more surges. And you can be sure that another Trump-like figure will emerge to exploit them — and undermine support for legal immigration right when we need it

more than ever.

Because, we are also at the dawn of a cold war with China in which both the economic and the military battlefields will be around technology — artificial intelligence, quantum computing, drones, autonomous vehicles, microchips, software, cyberwarfare, biotech, new materials and batteries. In this competition each side will be trying to leverage as much brain power, patents and start-ups as possible.

Alas, brains are distributed evenly around the world. The great advantage America has had, though, is that while we were just roughly four percent of the global population, *through immigration* and our open universities, we attracted a far higher percentage than any other country of high-energy, high-aspiring lower-skilled workers and the high-I.Q. risk-takers who start new companies, notes Craig Mundie, Microsoft's former chief research and strategy officer.

Steve Jobs's biological father came here from Syria to be a student, and the result was Apple. Sergey Brin's family moved here from Russia and the result was Google.

"We were the melting pot for risk-takers," Mundie told me. "And for many years we reaped the benefits of being overstocked with high-I.Q. risk-takers. To now curtail our overweighting mechanisms" — welcoming immigration and the education of foreign students — "at a time when other countries are becoming more hospitable, we run the risk of losing our single greatest competitive advantage and just reverting to the global mean."

That is not a formula for success.

Other countries get it. The pharmaceutical company BioNTech, which developed a Covid-19 vaccine with its U.S. partner Pfizer, was founded in 2008 by Dr. Ugur Sahin and his wife, Dr. Ozlem Tureci. Both were born to Turkish parents who immigrated from Turkey to Germany in the 1960s.

When the American Rhodes scholars were announced for this year, here is how the Indian newspaper The Hindu began its story: "Out of the 32 students, 22 are of color; 10 are Black …, nine are first-generation Americans or immigrants and one is a Dreamer with active Deferred Action for Childhood Arrivals (DACA) status. Four Indian-Americans are among the cohort."

So, there is a lot at stake in getting this border issue right. I would love to see Biden use his narrow majority, and maybe get a few Republicans as well, to drive through a law that simultaneously hardens the border, provides a pathway to citizenship for illegal immigrants already here and increases the quotas for legal immigrants — and ignores all the critics from the left and the right.

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The New York Times https://www.nytimes.com/2021/05/01/opinion/us-national-service-draft.html

Should Young Americans Be Required to Give a Year of Service?

May 1, 2021

By The Editorial Board
The editorial board is a group of opinion journalists whose views are informed by expertise, research, debate and certain longstanding values. It is separate from the newsroom.

1 American presidents have long vied to echo John Kennedy's "Ask not what your country can do for you."

2 The spirit of service, declared Ronald Reagan, "flows like a deep and mighty river through the history of our nation." Bill Clinton created AmeriCorps. George H.W. Bush likened volunteer organizations to "a thousand points of light." George W. Bush created the USA Freedom Corps. Barack Obama called on Americans to "ground our politics in the notion of a common good."

3 Their arguments are all the more compelling today, in a bitterly divided America struggling with a pandemic.

4 Many aging Vietnam-era veterans attest to the sense of community that came with either involuntary military service or the alternative service routes that those who refused the draft opted for. Conscription came to an end in 1973, and in the years since, this board has several times called on the government to expand the opportunities for national service, military or civilian. "For those young people who do not feel moved by patriotism or propelled by economics to enlist in the military, there should be other options for national service like AmeriCorps," we wrote in 2006.

5 The idea has a rich pedigree. When a nation is at peace, the philosopher-psychologist William James wrote in an early-20th-century essay, "The Moral Equivalent of War," the martial virtues of "intrepidity, contempt of softness, surrender of private interest, obedience to command" — the backbone of a strong nation, in his view — can be achieved through civic works.

6 James's focus on male service and industrial tasks is largely obsolete today. But his fundamental argument, that "a permanently successful peace-economy cannot be a

simple pleasure-economy," remains the basic case for national service. In an updated version of the case, Pete Buttigieg, now President Biden's secretary of transportation, pushed as a candidate for a program offering hundreds of thousands of national service opportunities to young Americans as a way to counter the growing threats to social cohesion.

Mr. Biden has an opportunity to make some version of this a reality. Gen. Stanley McChrystal, a former commander of international forces in Afghanistan and head of the "Serve America. Together" campaign, recently called on the president to invest in universal national service for one million young Americans annually as "the most important strategy we can implement to ensure the strength and security of our nation."

On the surface, the idea would seem to be attractive across the political spectrum — the idealism to liberals, the service to conservatives, the virtues of selfless sharing to millions of Americans who already perform some form of community service. According to Google trends, search interest in mandatory national service hit a five-year high in 2017 as the yawning political divide in America became increasingly evident.

What could be objectionable in asking all young people to pause before plunging into the scramble of adult life to donate some of their time and energies to some socially beneficial, critically needed service at home or abroad?

It would be an introduction to the responsibilities of citizenship, a communion with different layers of society and people of different backgrounds, a taste of different life paths. It could even be rewarded by credits toward tuition at a public university or other federal benefits, much as the G.I. Bill did for some veterans in years past.

The devil, as always, is in the phrasing, like "mandatory" or "government." To libertarians, talk of government-mandated service smacks of more government imposition on individual liberties, possibly even a violation of the 13th Amendment's proscription against "involuntary servitude." Some conservatives argue that national service would be, in effect, government-paid and government-managed social activism, displacing private and faith-based charity. Coerced service is not service, they argue. The rich would get the desirable jobs, while the poor would be stuck with the bad ones. The cost would outweigh the benefits to society.

These are serious arguments, and no doubt one reason mandatory service has been relegated to the fringes of legislative effort.

It is hard to imagine a government levying penalties on young people who do not want to do what is essentially volunteer work, unless it was offered as an alternative to mandatory military service, with women now also liable. That is not likely to happen, as

Mr. Buttigieg acknowledged when he said his proposed national service would be "if not legally obligatory but certainly a social norm."

14 That social norm is critically needed. With America's democracy threatened by a political and ideological chasm that seems to widen by the day, with dialogue rendered almost futile on fundamental issues such as racial justice, the environment, a battered economy and America's role in the world, the debate over national service is really a debate over how we move forward.

15 "It's a debate over how we will solve public problems and what we owe our country and each other," E.J. Dionne Jr. and Kayla Meltzer Drogosz wrote in a 2003 study on national service for the Brookings Institution. "If we decide there are no public things to which we are willing to pledge some of our time and some of our effort — not to mention 'our lives, our fortunes and our sacred honor' — then we will have quietly abandoned our nation's experiment in liberty rooted in mutual assistance and democratic aspiration."

16 In his speech to a joint session of Congress on Wednesday, Mr. Biden said, "It's time we remembered that 'we the people' are the government. You and I," and his call on the American people was "that we all do our part."

17 Asking young Americans for a year of their time for their country would be a powerful way to inculcate that call to service. It would not be a panacea for America's troubles, of course. But a year in which barriers of race, class and income were breached, working in areas like underresourced schools, national parks or the military, where the fruits of service were real and beneficial, could help restore a measure of the community, commitment and hope that America cries out for.

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The 'Hybrid Office' Could Be Great. It Could Also Be Hell.

The future of work isn't necessarily brighter than its past.

May 6, 2021

By Spencer Bokat-Lindell
Mr. Bokat-Lindell is a staff editor.

This article is part of the Debatable newsletter. You can sign up here to receive it on Tuesdays and Thursdays.

"The Post-Pandemic Office." "The Distributed Age." "The YOLO Economy." For the better part of a year now, management experts, business journalists and the high priests of the LinkedIn blogosphere have been telling us that the pandemic killed the traditional white-collar workplace and was replacing it with … well, something else.

But reports of the office's death have been greatly exaggerated before, and conservators of the old ways still remain — those who, like the chief executive officer of Goldman Sachs, believe the shift to remote work is "an aberration" to be corrected as quickly as possible. And sure enough, demand for office space, though still not what it was before the pandemic, seems to be on the rebound.

So how different will the future of work really be from its past, and what will it look like? Here's what people are saying.

Not dead, but definitely injured

As of March, American workers were supplying about 45 percent of their labor services from home, according to research from the University of Chicago's Becker Friedman Institute. That's a significant decline from the beginning of the pandemic, when more work was being done at home than on site, but still almost 10 times the prepandemic rate. And there are good reasons to think things won't simply snap back to the way they were:

- For one thing, the researchers note, the stigma of working from home — which used to be seen by some managers as a form of shirking — has now effectively disappeared.

- While about a quarter of employees say they never want to work remotely after the pandemic, about three-quarters want the option, a Microsoft report finds. The preference is so strong that most workers say they would even take an 8 percent pay cut to maintain the ability to work from home two or three days a week.

- On the whole, bosses want workers back in the office, but many understand they will have to compromise. If they don't, many fear they'll lose employees to other companies, Amy C. Edmondson, a Harvard Business School professor, told The Times. And between the lower overhead and increased productivity that accompanied the shift to remote work, there's a business incentive, too.

At the same time, workers aren't entirely satisfied with the way things are:

- About two-thirds say they want more in-person time with co-workers — a preference that seems especially prevalent among those under 25, most of whom lack a dedicated home office space and have struggled to connect with colleagues, Emma Jacobs writes for The Financial Times.

- Productivity may have increased during the pandemic, but that's in part because the line between work and leisure, hardly sharp before, has gotten even blurrier. In fact, a working paper from the National Bureau of Economic Research found that the shift to remote work lengthened the work day by about an hour, even as it reduced the amount of time spent in meetings.

"Just because we've managed to weather this storm doesn't mean it's an optimal way to work," Ms. Edmondson said. "If you're in a shipwreck and a piano top floats by, it becomes a lifesaver. But it's not the way you would have designed a lifesaver."

The hybrid model: The best of both worlds or the worst?

In an effort to design a better lifesaver, as it were, a majority of employers plan on offering an "office-centric" hybrid model where people have the option of working from home for part of the week, Lionel Laurent writes for Bloomberg.

By the numbers: In all, the researchers at the University of Chicago estimate the share of work done remotely will level off at about 20 percent after the pandemic restrictions end. That's about half as much remote work as is happening right now, but still four times the prepandemic share.

13 **Many think the hybrid model will change white-collar work for the better,** especially once the pandemic abates. "Your options are not 'in the office, with other people, 9 to 6 every day' *or* 'miserable and alone in my small apartment,'" the journalist Anne Helen Petersen writes. Instead: "A day or two or three in the office, depending on the needs of the week. A day in your actual home. A day with friends, in one of their homes, and/or a day at a co-working space or a coffee shop or, one of my personal favorites, a bar at the end of the day, with the clatter and chatter of other people around you."

14 **But others are less bullish.** "A lot of people assume that because we know how to work together [in the office], we know how to work apart, then we can do hybrid," Kristi Woolsey, an associate director at Boston Consulting Group, told The Financial Times. "But hybrid is a third way. It's incredibly difficult to do."

15 **What could go wrong?**

- Sid Sijbrandij, the chief executive officer of GitLab, argues that the hybrid model will create a cumbersome and potentially discriminatory system of tiered communication: "Eventually, remote workers will find that they are not getting promoted at an equal rate, because they are less visible, and the productive remote employees will leave for all-remote companies that invest in their remote team members."

16 • For the same reason, the hybrid model could end up worsening gender inequities in the workplace, as college-educated women with young children are much more likely than men to want to work from home full time. "Adding this up, you can see how the let-them-choose approach could lead to a diversity crisis," says Nicholas Bloom, one of the University of Chicago researchers. "Single young men who generally opt to go into the office five days a week could rocket up the firm while employees with young children, particularly women, prefer to work from home and are held back."

17 • At companies reducing their physical footprint, employees won't be guaranteed their own desk every day of the week. That could maximize the number of people dissatisfied with their arrangements, irritating both those who would prefer to work entirely in the office and those who would prefer to work entirely at home. It's also a way for employers to pass on the cost of real estate, a burden that will be disproportionately borne by younger and lower-income workers.

18 • Bosses, too, have apprehensions about the logistics of a hybrid model. "If Monday and Friday are likely to be overwhelmingly popular, what then?" Mr. Laurent writes. "If employees are told to pick different days, when will they collaborate with colleagues face-to-face? This will take time, effort and investment to manage."

19 **A cautionary tale:** "At its worst," Bryan Walsh writes at Axios, "hybrid work may resemble the subpar hybrid schooling too many American students have endured over the past year, with overworked teachers struggling to simultaneously handle in-person and remote students."

What about people who can't work from home?

20 Even at the height of workplace restrictions last April, about a third of U.S. employees reported never working remotely. The ability to do so is one that breaks starkly along lines of class, education and ethnicity: While people of all income levels say they want the option of working remotely, Aki Ito writes for Insider, "people who are highly educated, highly paid, and white expect to work from home in 2022 far more than their low-paid, less educated and Hispanic counterparts."

The shift to remote work has high stakes for those workers, too:

21 • As David Autor and Elisabeth Reynolds of the Massachusetts Institute of Technology concluded in a report last summer, a reduction in office time and business travel will mean steep declines in demand for "myriad other workers who feed, transport, clothe, entertain, and shelter people when they are not in their own homes."

22 • The effect will be especially pronounced in cities. Given that the service industry has provided the primary source of job growth in recent decades for urban non-college-educated workers, they wrote, "these changes in the economic structure of urban life would again fall heavily on the employment prospects of urban low-paid workers."

23 • According to McKinsey & Company, more than half of displaced low-wage workers may need to shift to higher-wage work requiring different skills to remain employed.

24 **But whether that will happen is far from certain.** Consider the case of Edvin Quic, who works for an app-based food delivery service in New York City, without benefits or the right to a minimum wage. At the beginning of the U.S. coronavirus outbreak, he was earning twice as much as he did before. But less than a year later, business was down again, to about $60 to $80 per day. As of February, he was planning to open a takeout restaurant in Brooklyn.

25 "Doing deliveries," he said, "there's no future in that."

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